



# Surface Mount Multilayer Ceramic Chip Capacitors MIL Qualified, Type CDR



## FEATURES

- Military qualified products
- Federal stock control number, CAGE CODE SHV71
- High reliability tested per MIL-PRF-55681
- Tin/lead termination codes “Z” and “U”
- Lead (Pb)-free termination codes “W”, “Y”, “M”
- Wet build process
- Reliable Noble Metal Electrode (NME) system
- Compliant to RoHS Directive 2011/65/EU
- Halogen-free according to IEC 61249-2-21 definition



RoHS  
COMPLIANT  
HALOGEN  
**FREE**  
Available

## Note

\* Pb containing terminations are not RoHS compliant, exemptions may apply

## APPLICATIONS

- Avionic systems
- Sonar systems
- Satellite systems
- Missiles applications
- Geographical information systems
- Global positioning systems

## ELECTRICAL SPECIFICATIONS

### Note

- Electrical characteristics at + 25 °C unless otherwise specified

**Operating Temperature:** - 55 °C to + 125 °C

**Capacitance Range:** 1.0 pF to 470 nF

**Voltage Range:** 50 V<sub>DC</sub> to 100 V<sub>DC</sub>

### Temperature Coefficient of Capacitance (TCC):

BP: 0 ppm/°C ± 30 ppm/°C from - 55 °C to + 125 °C, with 0 V<sub>DC</sub> applied

BX: ± 15 % from - 55 °C to + 125 °C, with 0 V<sub>DC</sub> applied

BX: + 15 %, - 25 % from - 55 °C to + 125 °C, with 100 % rated V<sub>DC</sub> applied

### Dissipation Factor (DF):

BP: 0.15 % maximum

BX: 2.50 % maximum

Test frequency:

1 MHz ± 50 kHz for BP capacitors ≤ 1000 pF

and for BX capacitors ≤ 100 pF

All other BP and BX at 1 kHz ± 50 Hz

### Aging Rate:

BP: 0 % maximum per decade

BX: 1 % maximum per decade

### Insulation Resistance (IR):

At + 25 °C and rated voltage 100 000 MΩ minimum or 1000 ΩF, whichever is less

### Dielectric Strength Test:

Performed per method 103 of EIA-198-2-E.

Applied test voltages:

≤ 100 V<sub>DC</sub>-rated: 250 % of rated voltage



| QUICK REFERENCE DATA |              |                     |             |         |
|----------------------|--------------|---------------------|-------------|---------|
| DIELECTRIC           | STYLE (CASE) | MAXIMUM VOLTAGE (V) | CAPACITANCE |         |
|                      |              |                     | MINIMUM     | MAXIMUM |
| BP                   | CDR01 (0805) | 100                 | 10 pF       | 180 pF  |
| BX                   | CDR01 (0805) | 100                 | 120 pF      | 4.7 nF  |
| BP                   | CDR02 (1805) | 100                 | 220 pF      | 270 pF  |
| BX                   | CDR02 (1805) | 100                 | 3.9 nF      | 22 nF   |
| BP                   | CDR03 (1808) | 100                 | 330 pF      | 1.0 nF  |
| BX                   | CDR03 (1808) | 100                 | 12 nF       | 68 nF   |
| BP                   | CDR04 (1812) | 100                 | 1.2 nF      | 3.3 nF  |
| BX                   | CDR04 (1812) | 100                 | 39 nF       | 180 nF  |
| BX                   | CDR06 (2225) | 50                  | 390 nF      | 470 nF  |
| BP                   | CDR31 (0805) | 100                 | 1.0 pF      | 680 pF  |
| BX                   | CDR31 (0805) | 100                 | 470 pF      | 18 nF   |
| BP                   | CDR32 (1206) | 100                 | 1.0 pF      | 2.2 nF  |
| BX                   | CDR32 (1206) | 100                 | 4.7 nF      | 39 nF   |
| BP                   | CDR33 (1210) | 100                 | 1.0 nF      | 3.3 nF  |
| BX                   | CDR33 (1210) | 100                 | 15 nF       | 100 nF  |
| BP                   | CDR34 (1812) | 100                 | 2.2 nF      | 10 nF   |
| BX                   | CDR34 (1812) | 100                 | 27 nF       | 180 nF  |
| BP                   | CDR35 (1825) | 100                 | 4.7 nF      | 22 nF   |
| BX                   | CDR35 (1825) | 100                 | 56 nF       | 470 nF  |

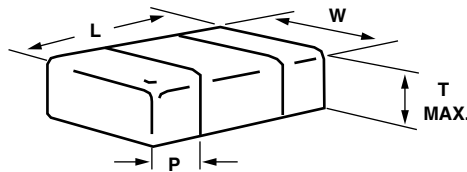
**Note**

- Detail ratings see selection chart

| ORDERING INFORMATION - MILITARY  |            |  |                                  |   |   |  |              |  |
|--|------------|--|----------------------------------|---|---|--|--------------|--|
| CDR31  | BX         | 102  | A                                | K   | Y   | S  | A            | T  |
| MILITARY STYLE   | DIELECTRIC | CAPACITANCE NOMINAL CODE   | DC VOLTAGE RATING <sup>(1)</sup> | CAPACITANCE TOLERANCE <sup>(2)</sup>  | TERMINATION   | FAILURE RATE   | MARKING      | PACKAGING  |
| CDR01<br>CDR02<br>CDR03<br>CDR04<br>CDR06<br>CDR31<br>CDR32<br>CDR33<br>CDR34<br>CDR35 | BP and BX  | Expressed in picofarads (pF). The first two digits are significant, the third is a multiplier.<br>Examples:<br>102 = 1000 pF<br>1R8 = 1.8 pF | A = 50 V<br>B = 100 V            | C = ± 0.25 pF<br>D = ± 0.5 pF<br>F = ± 1 %<br>J = ± 5 %<br>K = ± 10 %<br>M = ± 20 % | M = Silver Palladium<br>Y = Ni barrier with 100 % tin<br>W = Ni barrier with 100 % tin<br>Z = Ni barrier with tin/lead plate min. 4 % lead<br>U = Hot solder dipped (min. of 4 % lead) <sup>(3)</sup> | M = 1.0 %<br>P = 0.1 %<br>R = 0.01 %<br>S = 0.001 %<br>Consult factory for failure rate status | A = Unmarked | T = 7" reel/plastic tape<br>J = 7" reel (low quantity)<br>C = 7" reel/paper tape<br>R = 11 1/4"/13" reel/plastic tape<br>P = 11 1/4"/13" reel/paper tape<br>B = Bulk |

**Notes**

- <sup>(1)</sup> DC voltage rating should not be exceeded in application. Other application factors may affect the MLCC performance. Consult for questions: [mlcc@vishay.com](mailto:mlcc@vishay.com)
- <sup>(2)</sup> Available tolerances please see rating chart
- <sup>(3)</sup> MIL-PRF-55681 "U" termination part number have increased dimensions

**DIMENSIONS** in inches (millimeters)


| MIL-PRF-55681 | STYLE | LENGTH (L)                  | WIDTH (W)                   | MAXIMUM THICKNESS (T) | TERM. (P)    |              |
|---------------|-------|-----------------------------|-----------------------------|-----------------------|--------------|--------------|
|               |       |                             |                             |                       | MINIMUM      | MAXIMUM      |
| /1            | CDR01 | 0.080 ± 0.015 (2.03 ± 0.38) | 0.050 ± 0.015 (1.27 ± 0.38) | 0.055 (1.40)          | 0.010 (0.25) | 0.030 (0.75) |
|               | CDR02 | 0.180 ± 0.015 (4.57 ± 0.38) | 0.050 ± 0.015 (1.27 ± 0.38) | 0.055 (1.40)          | 0.010 (0.25) | 0.030 (0.75) |
|               | CDR03 | 0.180 ± 0.015 (4.57 ± 0.38) | 0.080 ± 0.015 (2.03 ± 0.38) | 0.080 (2.03)          | 0.010 (0.25) | 0.030 (0.75) |
|               | CDR04 | 0.180 ± 0.015 (4.57 ± 0.38) | 0.125 ± 0.015 (3.20 ± 0.38) | 0.080 (2.03)          | 0.010 (0.25) | 0.030 (0.75) |
| /3            | CDR06 | 0.225 ± 0.020 (5.72 ± 0.51) | 0.250 ± 0.020 (6.35 ± 0.51) | 0.080 (2.03)          | 0.010 (0.25) | 0.030 (0.75) |
| /7            | CDR31 | 0.078 ± 0.008 (2.00 ± 0.20) | 0.049 ± 0.008 (1.25 ± 0.20) | 0.051 (1.30)          | 0.012 (0.30) | 0.028 (0.70) |
| /8            | CDR32 | 0.125 ± 0.008 (3.20 ± 0.20) | 0.062 ± 0.008 (1.60 ± 0.20) | 0.051 (1.30)          | 0.012 (0.30) | 0.028 (0.70) |
| /9            | CDR33 | 0.125 ± 0.010 (3.20 ± 0.25) | 0.098 ± 0.010 (2.50 ± 0.25) | 0.059 (1.50)          | 0.010 (0.25) | 0.030 (0.75) |
| /10           | CDR34 | 0.176 ± 0.010 (4.50 ± 0.25) | 0.125 ± 0.010 (3.20 ± 0.25) | 0.059 (1.50)          | 0.010 (0.25) | 0.030 (0.75) |
| /11           | CDR35 | 0.176 ± 0.012 (4.50 ± 0.30) | 0.250 ± 0.012 (6.40 ± 0.30) | 0.059 (1.50)          | 0.008 (0.20) | 0.032 (0.80) |

**“U” TERMINATION** in inches (millimeters)

| STYLE          | LENGTH       | WIDTH/THICKNESS | PACKAGING CODES    |
|----------------|--------------|-----------------|--------------------|
| CDR01          | 0.020 (0.51) | 0.015 (0.38)    | “C”, “J”, “P”, “B” |
| CDR02 to CDR06 | 0.025 (0.64) | 0.015 (0.38)    | “T”, “J”, “R”, “B” |
| CDR31          | 0.023 (0.60) | 0.012 (0.30)    | “C”, “J”, “P”, “B” |
| CDR32 to CDR35 | 0.023 (0.60) | 0.012 (0.30)    | “T”, “J”, “R”, “B” |

**MIL-C-55681 QUALIFIED, TYPE CDR**

| MILITARY TYPE DESIGNATION | CAPACITANCE CODE | CAPACITANCE (pF) | CAPACITANCE TOLERANCE | RATED TEMP. AND VOLTAGE TEMP. LIMITS | VOLTAGE (DC) |
|---------------------------|------------------|------------------|-----------------------|--------------------------------------|--------------|
| <b>CDR01BP</b>            |                  |                  |                       |                                      |              |
| CDR01BP100B_ _ _          | 100              | 10               | J, K                  | BP                                   | 100          |
| CDR01BP120BJ_ _           | 120              | 12               | J                     | BP                                   | 100          |
| CDR01BP150B_ _ _          | 150              | 15               | J, K                  | BP                                   | 100          |
| CDR01BP180BJ_ _           | 180              | 18               | J                     | BP                                   | 100          |
| CDR01BP220B_ _ _          | 220              | 22               | J, K                  | BP                                   | 100          |
| CDR01BP270BJ_ _           | 270              | 27               | J                     | BP                                   | 100          |
| CDR01BP330B_ _ _          | 330              | 33               | J, K                  | BP                                   | 100          |
| CDR01BP390BJ_ _           | 390              | 39               | J                     | BP                                   | 100          |
| CDR01BP470B_ _ _          | 470              | 47               | J, K                  | BP                                   | 100          |
| CDR01BP560BJ_ _           | 560              | 56               | J                     | BP                                   | 100          |
| CDR01BP680B_ _ _          | 680              | 68               | J, K                  | BP                                   | 100          |
| CDR01BP820BJ_ _           | 820              | 82               | J                     | BP                                   | 100          |
| CDR01BP101B_ _ _          | 101              | 100              | J, K                  | BP                                   | 100          |
| CDR01BP121B_ _ _          | 121              | 120              | J, K                  | BP                                   | 100          |
| CDR01BP151B_ _ _          | 151              | 150              | J, K                  | BP                                   | 100          |
| CDR01BP181B_ _ _          | 181              | 180              | J, K                  | BP                                   | 100          |



| <b>MIL-C-55681 QUALIFIED, TYPE CDR</b> |                         |                         |                              |   |                     |
|--|-------------------------|-------------------------|------------------------------|---|---------------------|
| <b>MILITARY TYPE DESIGNATION</b>       | <b>CAPACITANCE CODE</b> | <b>CAPACITANCE (pF)</b> | <b>CAPACITANCE TOLERANCE</b> | <b>RATED TEMP. AND VOLTAGE TEMP. LIMITS</b> | <b>VOLTAGE (DC)</b> |
| <b>CDR01BX</b>                         |                         |                         |                              |   |                     |
| CDR01BX121B__                          | 121                     | 120                     | J, K                         | BX  | 100                 |
| CDR01BX151B__                          | 151                     | 150                     | J, K                         | BX  | 100                 |
| CDR01BX181B__                          | 181                     | 180                     | J, K                         | BX  | 100                 |
| CDR01BX221B__                          | 221                     | 220                     | K, M                         | BX  | 100                 |
| CDR01BX271BK__                         | 271                     | 270                     | K                            | BX  | 100                 |
| CDR01BX331B__                          | 331                     | 330                     | K, M                         | BX  | 100                 |
| CDR01BX391BK__                         | 391                     | 390                     | K                            | BX  | 100                 |
| CDR01BX471B__                          | 471                     | 470                     | K, M                         | BX  | 100                 |
| CDR01BX561BK__                         | 561                     | 560                     | K                            | BX  | 100                 |
| CDR01BX681B__                          | 681                     | 680                     | K, M                         | BX  | 100                 |
| CDR01BX821BK__                         | 821                     | 820                     | K                            | BX  | 100                 |
| CDR01BX102B__                          | 102                     | 1000                    | K, M                         | BX  | 100                 |
| CDR01BX122BK__                         | 122                     | 1200                    | K                            | BX  | 100                 |
| CDR01BX152B__                          | 152                     | 1500                    | K, M                         | BX  | 100                 |
| CDR01BX182BK__                         | 182                     | 1800                    | K                            | BX  | 100                 |
| CDR01BX222B__                          | 222                     | 2200                    | K, M                         | BX  | 100                 |
| CDR01BX272BK__                         | 272                     | 2700                    | K                            | BX  | 100                 |
| CDR01BX332B__                          | 332                     | 3300                    | K, M                         | BX  | 100                 |
| CDR01BX392AK__                         | 392                     | 3900                    | K                            | BX  | 50                  |
| CDR01BX472A__                          | 472                     | 4700                    | K, M                         | BX  | 50                  |
| <b>CDR02BP</b>                         |                         |                         |                              |   |                     |
| CDR02BP221B__                          | 221                     | 220                     | J, K                         | BP  | 100                 |
| CDR02BP271BJ__                         | 271                     | 270                     | J                            | BP  | 100                 |
| <b>CDR02BX</b>                         |                         |                         |                              |   |                     |
| CDR02BX392BK__                         | 392                     | 3900                    | K                            | BX  | 100                 |
| CDR02BX472B__                          | 472                     | 4700                    | K, M                         | BX  | 100                 |
| CDR02BX562BK__                         | 562                     | 5600                    | K                            | BX  | 100                 |
| CDR02BX682B__                          | 682                     | 6800                    | K, M                         | BX  | 100                 |
| CDR02BX822BK__                         | 822                     | 8200                    | K                            | BX  | 100                 |
| CDR02BX103B__                          | 103                     | 10 000                  | K, M                         | BX  | 100                 |
| CDR02BX123AK__                         | 123                     | 12 000                  | K                            | BX  | 50                  |
| CDR02BX153A__                          | 153                     | 15 000                  | K, M                         | BX  | 50                  |
| CDR02BX183AK__                         | 183                     | 18 000                  | K                            | BX  | 50                  |
| CDR02BX223A__                          | 223                     | 22 000                  | K, M                         | BX  | 50                  |
| <b>CDR03BP</b>                         |                         |                         |                              |   |                     |
| CDR03BP331B__                          | 331                     | 330                     | J, K                         | BP  | 100                 |
| CDR03BP391BJ__                         | 391                     | 390                     | J                            | BP  | 100                 |
| CDR03BP471B__                          | 471                     | 470                     | J, K                         | BP  | 100                 |
| CDR03BP561BJ__                         | 561                     | 560                     | J                            | BP  | 100                 |
| CDR03BP681B__                          | 681                     | 680                     | J, K                         | BP  | 100                 |
| CDR03BP821BJ__                         | 821                     | 820                     | J                            | BP  | 100                 |
| CDR03BP102B__                          | 102                     | 1000                    | J, K                         | BP  | 100                 |
| <b>CDR03BX</b>                         |                         |                         |                              |   |                     |
| CDR03BX123BK__                         | 123                     | 12 000                  | K                            | BX  | 100                 |
| CDR03BX153B__                          | 153                     | 15 000                  | K, M                         | BX  | 100                 |
| CDR03BX183BK__                         | 183                     | 18 000                  | K                            | BX  | 100                 |
| CDR03BX223B__                          | 223                     | 22 000                  | K, M                         | BX  | 100                 |
| CDR03BX273BK__                         | 273                     | 27 000                  | K                            | BX  | 100                 |
| CDR03BX333B__                          | 333                     | 33 000                  | K, M                         | BX  | 100                 |
| CDR03BX393AK__                         | 393                     | 39 000                  | K                            | BX  | 50                  |
| CDR03BX473A__                          | 473                     | 47 000                  | K, M                         | BX  | 50                  |
| CDR03BX563AK__                         | 563                     | 56 000                  | K                            | BX  | 50                  |
| CDR03BX683A__                          | 683                     | 68 000                  | K, M                         | BX  | 50                  |



| <b>MIL-C-55681 QUALIFIED, TYPE CDR</b> |                         |                         |                              |   |                     |
|--|-------------------------|-------------------------|------------------------------|---|---------------------|
| <b>MILITARY TYPE DESIGNATION</b>       | <b>CAPACITANCE CODE</b> | <b>CAPACITANCE (pF)</b> | <b>CAPACITANCE TOLERANCE</b> | <b>RATED TEMP. AND VOLTAGE TEMP. LIMITS</b> | <b>VOLTAGE (DC)</b> |
| <b>CDR04BP</b>                         |                         |                         |                              |   |                     |
| CDR04BP122BJ_ _                        | 122                     | 1200                    | J                            | BP  | 100                 |
| CDR04BP152B_ _ _                       | 152                     | 1500                    | J, K                         | BP  | 100                 |
| CDR04BP182BJ_ _                        | 182                     | 1800                    | J                            | BP  | 100                 |
| CDR04BP222B_ _ _                       | 222                     | 2200                    | J, K                         | BP  | 100                 |
| CDR04BP272BJ_ _                        | 272                     | 2700                    | J                            | BP  | 100                 |
| CDR04BP332B_ _ _                       | 332                     | 3300                    | J, K                         | BP  | 100                 |
| <b>CDR04BX</b>                         |                         |                         |                              |   |                     |
| CDR04BX393BK_ _                        | 393                     | 39 000                  | K                            | BX  | 100                 |
| CDR04BX473B_ _ _                       | 473                     | 47 000                  | K, M                         | BX  | 100                 |
| CDR04BX563BK_ _                        | 563                     | 56 000                  | K                            | BX  | 100                 |
| CDR04BX823AK_ _                        | 823                     | 82 000                  | K                            | BX  | 50                  |
| CDR04BX104A_ _ _                       | 104                     | 100 000                 | K, M                         | BX  | 50                  |
| CDR04BX124AK_ _                        | 124                     | 120 000                 | K                            | BX  | 50                  |
| CDR04BX154A_ _ _                       | 154                     | 150 000                 | K, M                         | BX  | 50                  |
| CDR04BX184AK_ _                        | 184                     | 180 000                 | K                            | BX  | 50                  |
| <b>CDR06BX</b>                         |                         |                         |                              |   |                     |
| CDR06BX394AK_ _                        | 394                     | 390 000                 | K                            | BX  | 50                  |
| CDR06BX474A_ _ _                       | 474                     | 470 000                 | K, M                         | BX  | 50                  |
| <b>CDR31BP</b>                         |                         |                         |                              |   |                     |
| CDR31BP1R0B_ _ _                       | 1R0                     | 1                       | C                            | BP  | 100                 |
| CDR31BP1R1B_ _ _                       | 1R1                     | 1.1                     | C                            | BP  | 100                 |
| CDR31BP1R2B_ _ _                       | 1R2                     | 1.2                     | C                            | BP  | 100                 |
| CDR31BP1R3B_ _ _                       | 1R3                     | 1.3                     | C                            | BP  | 100                 |
| CDR31BP1R5B_ _ _                       | 1R5                     | 1.5                     | C                            | BP  | 100                 |
| CDR31BP1R6B_ _ _                       | 1R6                     | 1.6                     | C                            | BP  | 100                 |
| CDR31BP1R8B_ _ _                       | 1R8                     | 1.8                     | C                            | BP  | 100                 |
| CDR31BP2R0B_ _ _                       | 2R0                     | 2                       | C                            | BP  | 100                 |
| CDR31BP2R2B_ _ _                       | 2R2                     | 2.2                     | C                            | BP  | 100                 |
| CDR31BP2R4B_ _ _                       | 2R4                     | 2.4                     | C                            | BP  | 100                 |
| CDR31BP2R7B_ _ _                       | 2R7                     | 2.7                     | C, D                         | BP  | 100                 |
| CDR31BP3R0B_ _ _                       | 3R0                     | 3                       | C, D                         | BP  | 100                 |
| CDR31BP3R3B_ _ _                       | 3R3                     | 3.3                     | C, D                         | BP  | 100                 |
| CDR31BP3R6B_ _ _                       | 3R6                     | 3.6                     | C, D                         | BP  | 100                 |
| CDR31BP3R9B_ _ _                       | 3R9                     | 3.9                     | C, D                         | BP  | 100                 |
| CDR31BP4R3B_ _ _                       | 4R3                     | 4.3                     | C, D                         | BP  | 100                 |
| CDR31BP4R7B_ _ _                       | 4R7                     | 4.7                     | C, D                         | BP  | 100                 |
| CDR31BP5R1B_ _ _                       | 5R1                     | 5.1                     | C, D                         | BP  | 100                 |
| CDR31BP5R6B_ _ _                       | 5R6                     | 5.6                     | C, D                         | BP  | 100                 |
| CDR31BP6R2B_ _ _                       | 6R2                     | 6.2                     | C, D                         | BP  | 100                 |
| CDR31BP6R8B_ _ _                       | 6R8                     | 6.8                     | C, D                         | BP  | 100                 |
| CDR31BP7R5B_ _ _                       | 7R5                     | 7.5                     | C, D                         | BP  | 100                 |
| CDR31BP8R2B_ _ _                       | 8R2                     | 8.2                     | C, D                         | BP  | 100                 |
| CDR31BP9R1B_ _ _                       | 9R1                     | 9.1                     | C, D                         | BP  | 100                 |
| CDR31BP100B_ _ _                       | 100                     | 10                      | F, J, K                      | BP  | 100                 |
| CDR31BP110B_ _ _                       | 110                     | 11                      | F, J, K                      | BP  | 100                 |



| <b>MIL-C-55681 QUALIFIED, TYPE CDR</b> |                         |                         |                              |   |                     |
|--|-------------------------|-------------------------|------------------------------|---|---------------------|
| <b>MILITARY TYPE DESIGNATION</b>       | <b>CAPACITANCE CODE</b> | <b>CAPACITANCE (pF)</b> | <b>CAPACITANCE TOLERANCE</b> | <b>RATED TEMP. AND VOLTAGE TEMP. LIMITS</b> | <b>VOLTAGE (DC)</b> |
| <b>CDR31BP</b>                         |                         |                         |                              |   |                     |
| CDR31BP120B_ _ _                       | 120                     | 12                      | F, J, K                      | BP  | 100                 |
| CDR31BP130B_ _ _                       | 130                     | 13                      | F, J, K                      | BP  | 100                 |
| CDR31BP150B_ _ _                       | 150                     | 15                      | F, J, K                      | BP  | 100                 |
| CDR31BP160B_ _ _                       | 160                     | 16                      | F, J, K                      | BP  | 100                 |
| CDR31BP180B_ _ _                       | 180                     | 18                      | F, J, K                      | BP  | 100                 |
| CDR31BP200B_ _ _                       | 200                     | 20                      | F, J, K                      | BP  | 100                 |
| CDR31BP220B_ _ _                       | 220                     | 22                      | F, J, K                      | BP  | 100                 |
| CDR31BP240B_ _ _                       | 240                     | 24                      | F, J, K                      | BP  | 100                 |
| CDR31BP270B_ _ _                       | 270                     | 27                      | F, J, K                      | BP  | 100                 |
| CDR31BP300B_ _ _                       | 300                     | 30                      | F, J, K                      | BP  | 100                 |
| CDR31BP330B_ _ _                       | 330                     | 33                      | F, J, K                      | BP  | 100                 |
| CDR31BP360B_ _ _                       | 360                     | 36                      | F, J, K                      | BP  | 100                 |
| CDR31BP390B_ _ _                       | 390                     | 39                      | F, J, K                      | BP  | 100                 |
| CDR31BP430B_ _ _                       | 430                     | 43                      | F, J, K                      | BP  | 100                 |
| CDR31BP470B_ _ _                       | 470                     | 47                      | F, J, K                      | BP  | 100                 |
| CDR31BP510B_ _ _                       | 510                     | 51                      | F, J, K                      | BP  | 100                 |
| CDR31BP560B_ _ _                       | 560                     | 56                      | F, J, K                      | BP  | 100                 |
| CDR31BP620B_ _ _                       | 620                     | 62                      | F, J, K                      | BP  | 100                 |
| CDR31BP680B_ _ _                       | 680                     | 68                      | F, J, K                      | BP  | 100                 |
| CDR31BP750B_ _ _                       | 750                     | 75                      | F, J, K                      | BP  | 100                 |
| CDR31BP820B_ _ _                       | 820                     | 82                      | F, J, K                      | BP  | 100                 |
| CDR31BP910B_ _ _                       | 910                     | 91                      | F, J, K                      | BP  | 100                 |
| CDR31BP101B_ _ _                       | 101                     | 100                     | F, J, K                      | BP  | 100                 |
| CDR31BP111B_ _ _                       | 111                     | 110                     | F, J, K                      | BP  | 100                 |
| CDR31BP121B_ _ _                       | 121                     | 120                     | F, J, K                      | BP  | 100                 |
| CDR31BP131B_ _ _                       | 131                     | 130                     | F, J, K                      | BP  | 100                 |
| CDR31BP151B_ _ _                       | 151                     | 150                     | F, J, K                      | BP  | 100                 |
| CDR31BP161B_ _ _                       | 161                     | 160                     | F, J, K                      | BP  | 100                 |
| CDR31BP181B_ _ _                       | 181                     | 180                     | F, J, K                      | BP  | 100                 |
| CDR31BP201B_ _ _                       | 201                     | 200                     | F, J, K                      | BP  | 100                 |
| CDR31BP221B_ _ _                       | 221                     | 220                     | F, J, K                      | BP  | 100                 |
| CDR31BP241B_ _ _                       | 241                     | 240                     | F, J, K                      | BP  | 100                 |
| CDR31BP271B_ _ _                       | 271                     | 270                     | F, J, K                      | BP  | 100                 |
| CDR31BP301B_ _ _                       | 301                     | 300                     | F, J, K                      | BP  | 100                 |
| CDR31BP331B_ _ _                       | 331                     | 330                     | F, J, K                      | BP  | 100                 |
| CDR31BP361B_ _ _                       | 361                     | 360                     | F, J, K                      | BP  | 100                 |
| CDR31BP391B_ _ _                       | 391                     | 390                     | F, J, K                      | BP  | 100                 |
| CDR31BP431B_ _ _                       | 431                     | 430                     | F, J, K                      | BP  | 100                 |
| CDR31BP471B_ _ _                       | 471                     | 470                     | F, J, K                      | BP  | 100                 |
| CDR31BP511A_ _ _                       | 511                     | 510                     | F, J, K                      | BP  | 50                  |
| CDR31BP561A_ _ _                       | 561                     | 560                     | F, J, K                      | BP  | 50                  |
| CDR31BP621A_ _ _                       | 621                     | 620                     | F, J, K                      | BP  | 50                  |
| CDR31BP681A_ _ _                       | 681                     | 680                     | F, J, K                      | BP  | 50                  |



| <b>MIL-C-55681 QUALIFIED, TYPE CDR</b> |                         |                         |                              |   |                     |
|--|-------------------------|-------------------------|------------------------------|---|---------------------|
| <b>MILITARY TYPE DESIGNATION</b>       | <b>CAPACITANCE CODE</b> | <b>CAPACITANCE (pF)</b> | <b>CAPACITANCE TOLERANCE</b> | <b>RATED TEMP. AND VOLTAGE TEMP. LIMITS</b> | <b>VOLTAGE (DC)</b> |
| <b>CDR31BX</b>                         |                         |                         |                              |   |                     |
| CDR31BX471B_ _ _                       | 471                     | 470                     | K, M                         | BX  | 100                 |
| CDR31BX561B_ _ _                       | 561                     | 560                     | K, M                         | BX  | 100                 |
| CDR31BX681B_ _ _                       | 681                     | 680                     | K, M                         | BX  | 100                 |
| CDR31BX821B_ _ _                       | 821                     | 820                     | K, M                         | BX  | 100                 |
| CDR31BX102B_ _ _                       | 102                     | 1000                    | K, M                         | BX  | 100                 |
| CDR31BX122B_ _ _                       | 122                     | 1200                    | K, M                         | BX  | 100                 |
| CDR31BX152B_ _ _                       | 152                     | 1500                    | K, M                         | BX  | 100                 |
| CDR31BX182B_ _ _                       | 182                     | 1800                    | K, M                         | BX  | 100                 |
| CDR31BX222B_ _ _                       | 222                     | 2200                    | K, M                         | BX  | 100                 |
| CDR31BX272B_ _ _                       | 272                     | 2700                    | K, M                         | BX  | 100                 |
| CDR31BX332B_ _ _                       | 332                     | 3300                    | K, M                         | BX  | 100                 |
| CDR31BX392B_ _ _                       | 392                     | 3900                    | K, M                         | BX  | 100                 |
| CDR31BX472B_ _ _                       | 472                     | 4700                    | K, M                         | BX  | 100                 |
| CDR31BX562A_ _ _                       | 562                     | 5600                    | K, M                         | BX  | 50                  |
| CDR31BX682A_ _ _                       | 682                     | 6800                    | K, M                         | BX  | 50                  |
| CDR31BX822A_ _ _                       | 822                     | 8200                    | K, M                         | BX  | 50                  |
| CDR31BX103A_ _ _                       | 103                     | 10 000                  | K, M                         | BX  | 50                  |
| CDR31BX123A_ _ _                       | 123                     | 12 000                  | K, M                         | BX  | 50                  |
| CDR31BX153A_ _ _                       | 153                     | 15 000                  | K, M                         | BX  | 50                  |
| CDR31BX183A_ _ _                       | 183                     | 18 000                  | K, M                         | BX  | 50                  |
| <b>CDR32BP</b>                         |                         |                         |                              |   |                     |
| CDR32BP1R0B_ _ _                       | 1R0                     | 1                       | C                            | BP  | 100                 |
| CDR32BP1R1B_ _ _                       | 1R1                     | 1.1                     | C                            | BP  | 100                 |
| CDR32BP1R2B_ _ _                       | 1R2                     | 1.2                     | C                            | BP  | 100                 |
| CDR32BP1R3B_ _ _                       | 1R3                     | 1.3                     | C                            | BP  | 100                 |
| CDR32BP1R5B_ _ _                       | 1R5                     | 1.5                     | C                            | BP  | 100                 |
| CDR32BP1R6B_ _ _                       | 1R6                     | 1.6                     | C                            | BP  | 100                 |
| CDR32BP1R8B_ _ _                       | 1R8                     | 1.8                     | C                            | BP  | 100                 |
| CDR32BP2R0B_ _ _                       | 2R0                     | 2                       | C                            | BP  | 100                 |
| CDR32BP2R2B_ _ _                       | 2R2                     | 2.2                     | C                            | BP  | 100                 |
| CDR32BP2R4B_ _ _                       | 2R4                     | 2.4                     | C                            | BP  | 100                 |
| CDR32BP2R7B_ _ _                       | 2R7                     | 2.7                     | C, D                         | BP  | 100                 |
| CDR32BP3R0B_ _ _                       | 3R0                     | 3                       | C, D                         | BP  | 100                 |
| CDR32BP3R3B_ _ _                       | 3R3                     | 3.3                     | C, D                         | BP  | 100                 |
| CDR32BP3R6B_ _ _                       | 3R6                     | 3.6                     | C, D                         | BP  | 100                 |
| CDR32BP3R9B_ _ _                       | 3R9                     | 3.9                     | C, D                         | BP  | 100                 |
| CDR32BP4R3B_ _ _                       | 4R3                     | 4.3                     | C, D                         | BP  | 100                 |
| CDR32BP4R7B_ _ _                       | 4R7                     | 4.7                     | C, D                         | BP  | 100                 |
| CDR32BP5R1B_ _ _                       | 5R1                     | 5.1                     | C, D                         | BP  | 100                 |
| CDR32BP5R6B_ _ _                       | 5R6                     | 5.6                     | C, D                         | BP  | 100                 |
| CDR32BP6R2B_ _ _                       | 6R2                     | 6.2                     | C, D                         | BP  | 100                 |
| CDR32BP6R8B_ _ _                       | 6R8                     | 6.8                     | C, D                         | BP  | 100                 |
| CDR32BP7R5B_ _ _                       | 7R5                     | 7.5                     | C, D                         | BP  | 100                 |
| CDR32BP8R2B_ _ _                       | 8R2                     | 8.2                     | C, D                         | BP  | 100                 |
| CDR32BP9R1B_ _ _                       | 9R1                     | 9.1                     | C, D                         | BP  | 100                 |
| CDR32BP100B_ _ _                       | 100                     | 10                      | F, J, K                      | BP  | 100                 |



| <b>MIL-C-55681 QUALIFIED, TYPE CDR</b> |                         |                         |                              |   |                     |
|--|-------------------------|-------------------------|------------------------------|---|---------------------|
| <b>MILITARY TYPE DESIGNATION</b>       | <b>CAPACITANCE CODE</b> | <b>CAPACITANCE (pF)</b> | <b>CAPACITANCE TOLERANCE</b> | <b>RATED TEMP. AND VOLTAGE TEMP. LIMITS</b> | <b>VOLTAGE (DC)</b> |
| <b>CDR32BP</b>                         |                         |                         |                              |   |                     |
| CDR32BP110B_ _ _                       | 110                     | 11                      | F, J, K                      | BP  | 100                 |
| CDR32BP120B_ _ _                       | 120                     | 12                      | F, J, K                      | BP  | 100                 |
| CDR32BP130B_ _ _                       | 130                     | 13                      | F, J, K                      | BP  | 100                 |
| CDR32BP150B_ _ _                       | 150                     | 15                      | F, J, K                      | BP  | 100                 |
| CDR32BP160B_ _ _                       | 160                     | 16                      | F, J, K                      | BP  | 100                 |
| CDR32BP180B_ _ _                       | 180                     | 18                      | F, J, K                      | BP  | 100                 |
| CDR32BP200B_ _ _                       | 200                     | 20                      | F, J, K                      | BP  | 100                 |
| CDR32BP220B_ _ _                       | 220                     | 22                      | F, J, K                      | BP  | 100                 |
| CDR32BP240B_ _ _                       | 240                     | 24                      | F, J, K                      | BP  | 100                 |
| CDR32BP270B_ _ _                       | 270                     | 27                      | F, J, K                      | BP  | 100                 |
| CDR32BP300B_ _ _                       | 300                     | 30                      | F, J, K                      | BP  | 100                 |
| CDR32BP330B_ _ _                       | 330                     | 33                      | F, J, K                      | BP  | 100                 |
| CDR32BP360B_ _ _                       | 360                     | 36                      | F, J, K                      | BP  | 100                 |
| CDR32BP390B_ _ _                       | 390                     | 39                      | F, J, K                      | BP  | 100                 |
| CDR32BP430B_ _ _                       | 430                     | 43                      | F, J, K                      | BP  | 100                 |
| CDR32BP470B_ _ _                       | 470                     | 47                      | F, J, K                      | BP  | 100                 |
| CDR32BP510B_ _ _                       | 510                     | 51                      | F, J, K                      | BP  | 100                 |
| CDR32BP560B_ _ _                       | 560                     | 56                      | F, J, K                      | BP  | 100                 |
| CDR32BP620B_ _ _                       | 620                     | 62                      | F, J, K                      | BP  | 100                 |
| CDR32BP680B_ _ _                       | 680                     | 68                      | F, J, K                      | BP  | 100                 |
| CDR32BP750B_ _ _                       | 750                     | 75                      | F, J, K                      | BP  | 100                 |
| CDR32BP820B_ _ _                       | 820                     | 82                      | F, J, K                      | BP  | 100                 |
| CDR32BP910B_ _ _                       | 910                     | 91                      | F, J, K                      | BP  | 100                 |
| CDR32BP101B_ _ _                       | 101                     | 100                     | F, J, K                      | BP  | 100                 |
| CDR32BP111B_ _ _                       | 111                     | 110                     | F, J, K                      | BP  | 100                 |
| CDR32BP121B_ _ _                       | 121                     | 120                     | F, J, K                      | BP  | 100                 |
| CDR32BP131B_ _ _                       | 131                     | 130                     | F, J, K                      | BP  | 100                 |
| CDR32BP151B_ _ _                       | 151                     | 150                     | F, J, K                      | BP  | 100                 |
| CDR32BP161B_ _ _                       | 161                     | 160                     | F, J, K                      | BP  | 100                 |
| CDR32BP181B_ _ _                       | 181                     | 180                     | F, J, K                      | BP  | 100                 |
| CDR32BP201B_ _ _                       | 201                     | 200                     | F, J, K                      | BP  | 100                 |
| CDR32BP221B_ _ _                       | 221                     | 220                     | F, J, K                      | BP  | 100                 |
| CDR32BP241B_ _ _                       | 241                     | 240                     | F, J, K                      | BP  | 100                 |
| CDR32BP271B_ _ _                       | 271                     | 270                     | F, J, K                      | BP  | 100                 |
| CDR32BP301B_ _ _                       | 301                     | 300                     | F, J, K                      | BP  | 100                 |
| CDR32BP331B_ _ _                       | 331                     | 330                     | F, J, K                      | BP  | 100                 |
| CDR32BP361B_ _ _                       | 361                     | 360                     | F, J, K                      | BP  | 100                 |
| CDR32BP391B_ _ _                       | 391                     | 390                     | F, J, K                      | BP  | 100                 |
| CDR32BP431B_ _ _                       | 431                     | 430                     | F, J, K                      | BP  | 100                 |
| CDR32BP471B_ _ _                       | 471                     | 470                     | F, J, K                      | BP  | 100                 |
| CDR32BP511B_ _ _                       | 511                     | 510                     | F, J, K                      | BP  | 100                 |
| CDR32BP561B_ _ _                       | 561                     | 560                     | F, J, K                      | BP  | 100                 |
| CDR32BP621B_ _ _                       | 621                     | 620                     | F, J, K                      | BP  | 100                 |
| CDR32BP681B_ _ _                       | 681                     | 680                     | F, J, K                      | BP  | 100                 |
| CDR32BP751B_ _ _                       | 751                     | 750                     | F, J, K                      | BP  | 100                 |
| CDR32BP821B_ _ _                       | 821                     | 820                     | F, J, K                      | BP  | 100                 |



| <b>MIL-C-55681 QUALIFIED, TYPE CDR</b> |                         |                         |                              |   |                     |
|--|-------------------------|-------------------------|------------------------------|---|---------------------|
| <b>MILITARY TYPE DESIGNATION</b>       | <b>CAPACITANCE CODE</b> | <b>CAPACITANCE (pF)</b> | <b>CAPACITANCE TOLERANCE</b> | <b>RATED TEMP. AND VOLTAGE TEMP. LIMITS</b> | <b>VOLTAGE (DC)</b> |
| <b>CDR32BP</b>                         |                         |                         |                              |   |                     |
| CDR32BP911B_ _ _                       | 911                     | 910                     | F, J, K                      | BP  | 100                 |
| CDR32BP102B_ _ _                       | 102                     | 1000                    | F, J, K                      | BP  | 100                 |
| CDR32BP112A_ _ _                       | 112                     | 1100                    | F, J, K                      | BP  | 50                  |
| CDR32BP122A_ _ _                       | 122                     | 1200                    | F, J, K                      | BP  | 50                  |
| CDR32BP132A_ _ _                       | 132                     | 1300                    | F, J, K                      | BP  | 50                  |
| CDR32BP152A_ _ _                       | 152                     | 1500                    | F, J, K                      | BP  | 50                  |
| CDR32BP162A_ _ _                       | 162                     | 1600                    | F, J, K                      | BP  | 50                  |
| CDR32BP182A_ _ _                       | 182                     | 1800                    | F, J, K                      | BP  | 50                  |
| CDR32BP202A_ _ _                       | 202                     | 2000                    | F, J, K                      | BP  | 50                  |
| CDR32BP222A_ _ _                       | 222                     | 2200                    | F, J, K                      | BP  | 50                  |
| <b>CDR32BX</b>                         |                         |                         |                              |   |                     |
| CDR32BX472B_ _ _                       | 472                     | 4700                    | K, M                         | BX  | 100                 |
| CDR32BX562B_ _ _                       | 562                     | 5600                    | K, M                         | BX  | 100                 |
| CDR32BX682B_ _ _                       | 682                     | 6800                    | K, M                         | BX  | 100                 |
| CDR32BX822B_ _ _                       | 822                     | 8200                    | K, M                         | BX  | 100                 |
| CDR32BX103B_ _ _                       | 103                     | 10 000                  | K, M                         | BX  | 100                 |
| CDR32BX123B_ _ _                       | 123                     | 12 000                  | K, M                         | BX  | 100                 |
| CDR32BX153B_ _ _                       | 153                     | 15 000                  | K, M                         | BX  | 100                 |
| CDR32BX183A_ _ _                       | 183                     | 18 000                  | K, M                         | BX  | 50                  |
| CDR32BX223A_ _ _                       | 223                     | 22 000                  | K, M                         | BX  | 50                  |
| CDR32BX273A_ _ _                       | 273                     | 27 000                  | K, M                         | BX  | 50                  |
| CDR32BX333A_ _ _                       | 333                     | 33 000                  | K, M                         | BX  | 50                  |
| CDR32BX393A_ _ _                       | 393                     | 39 000                  | K, M                         | BX  | 50                  |
| <b>CDR33BP</b>                         |                         |                         |                              |   |                     |
| CDR33BP102B_ _ _                       | 102                     | 1000                    | F, J, K                      | BP  | 100                 |
| CDR33BP112B_ _ _                       | 112                     | 1100                    | F, J, K                      | BP  | 100                 |
| CDR33BP122B_ _ _                       | 122                     | 1200                    | F, J, K                      | BP  | 100                 |
| CDR33BP132B_ _ _                       | 132                     | 1300                    | F, J, K                      | BP  | 100                 |
| CDR33BP152B_ _ _                       | 152                     | 1500                    | F, J, K                      | BP  | 100                 |
| CDR33BP162B_ _ _                       | 162                     | 1600                    | F, J, K                      | BP  | 100                 |
| CDR33BP182B_ _ _                       | 182                     | 1800                    | F, J, K                      | BP  | 100                 |
| CDR33BP202B_ _ _                       | 202                     | 2000                    | F, J, K                      | BP  | 100                 |
| CDR33BP222B_ _ _                       | 222                     | 2200                    | F, J, K                      | BP  | 100                 |
| CDR33BP242A_ _ _                       | 242                     | 2400                    | F, J, K                      | BP  | 50                  |
| CDR33BP272A_ _ _                       | 272                     | 2700                    | F, J, K                      | BP  | 50                  |
| CDR33BP302A_ _ _                       | 302                     | 3000                    | F, J, K                      | BP  | 50                  |
| CDR33BP332A_ _ _                       | 332                     | 3300                    | F, J, K                      | BP  | 50                  |
| <b>CDR33BX</b>                         |                         |                         |                              |   |                     |
| CDR33BX153B_ _ _                       | 153                     | 15 000                  | K, M                         | BX  | 100                 |
| CDR33BX183B_ _ _                       | 183                     | 18 000                  | K, M                         | BX  | 100                 |
| CDR33BX223B_ _ _                       | 223                     | 22 000                  | K, M                         | BX  | 100                 |
| CDR33BX273B_ _ _                       | 273                     | 27 000                  | K, M                         | BX  | 100                 |
| CDR33BX393A_ _ _                       | 393                     | 39 000                  | K, M                         | BX  | 50                  |
| CDR33BX473A_ _ _                       | 473                     | 47 000                  | K, M                         | BX  | 50                  |
| CDR33BX563A_ _ _                       | 563                     | 56 000                  | K, M                         | BX  | 50                  |
| CDR33BX683A_ _ _                       | 683                     | 68 000                  | K, M                         | BX  | 50                  |
| CDR33BX823A_ _ _                       | 823                     | 82 000                  | K, M                         | BX  | 50                  |
| CDR33BX104A_ _ _                       | 104                     | 100 000                 | K, M                         | BX  | 50                  |



| <b>MIL-C-55681 QUALIFIED, TYPE CDR</b> |                         |                         |                              |   |                     |
|--|-------------------------|-------------------------|------------------------------|---|---------------------|
| <b>MILITARY TYPE DESIGNATION</b>       | <b>CAPACITANCE CODE</b> | <b>CAPACITANCE (pF)</b> | <b>CAPACITANCE TOLERANCE</b> | <b>RATED TEMP. AND VOLTAGE TEMP. LIMITS</b> | <b>VOLTAGE (DC)</b> |
| <b>CDR34BP</b>                         |                         |                         |                              |   |                     |
| CDR34BP222B_ _ _                       | 222                     | 2200                    | F, J, K                      | BP  | 100                 |
| CDR34BP242B_ _ _                       | 242                     | 2400                    | F, J, K                      | BP  | 100                 |
| CDR34BP272B_ _ _                       | 272                     | 2700                    | F, J, K                      | BP  | 100                 |
| CDR34BP302B_ _ _                       | 302                     | 3000                    | F, J, K                      | BP  | 100                 |
| CDR34BP332B_ _ _                       | 332                     | 3300                    | F, J, K                      | BP  | 100                 |
| CDR34BP362B_ _ _                       | 362                     | 3600                    | F, J, K                      | BP  | 100                 |
| CDR34BP392B_ _ _                       | 392                     | 3900                    | F, J, K                      | BP  | 100                 |
| CDR34BP432B_ _ _                       | 432                     | 4300                    | F, J, K                      | BP  | 100                 |
| CDR34BP472B_ _ _                       | 472                     | 4700                    | F, J, K                      | BP  | 100                 |
| CDR34BP512A_ _ _                       | 512                     | 5100                    | F, J, K                      | BP  | 50                  |
| CDR34BP562A_ _ _                       | 562                     | 5600                    | F, J, K                      | BP  | 50                  |
| CDR34BP622A_ _ _                       | 622                     | 6200                    | F, J, K                      | BP  | 50                  |
| CDR34BP682A_ _ _                       | 682                     | 6800                    | F, J, K                      | BP  | 50                  |
| CDR34BP752A_ _ _                       | 752                     | 7500                    | F, J, K                      | BP  | 50                  |
| CDR34BP822A_ _ _                       | 822                     | 8200                    | F, J, K                      | BP  | 50                  |
| CDR34BP912A_ _ _                       | 912                     | 9100                    | F, J, K                      | BP  | 50                  |
| CDR34BP103A_ _ _                       | 103                     | 10 000                  | F, J, K                      | BP  | 50                  |
| <b>CDR34BX</b>                         |                         |                         |                              |   |                     |
| CDR34BX273B_ _ _                       | 273                     | 27 000                  | K, M                         | BX  | 100                 |
| CDR34BX333B_ _ _                       | 333                     | 33 000                  | K, M                         | BX  | 100                 |
| CDR34BX393B_ _ _                       | 393                     | 39 000                  | K, M                         | BX  | 100                 |
| CDR34BX473B_ _ _                       | 473                     | 47 000                  | K, M                         | BX  | 100                 |
| CDR34BX563B_ _ _                       | 563                     | 56 000                  | K, M                         | BX  | 100                 |
| CDR34BX104A_ _ _                       | 104                     | 100 000                 | K, M                         | BX  | 50                  |
| CDR34BX124A_ _ _                       | 124                     | 120 000                 | K, M                         | BX  | 50                  |
| CDR34BX154A_ _ _                       | 154                     | 150 000                 | K, M                         | BX  | 50                  |
| CDR34BX184A_ _ _                       | 184                     | 180 000                 | K, M                         | BX  | 50                  |
| <b>CDR35BP</b>                         |                         |                         |                              |   |                     |
| CDR35BP472B_ _ _                       | 472                     | 4700                    | F, J, K                      | BP  | 100                 |
| CDR35BP512B_ _ _                       | 512                     | 5100                    | F, J, K                      | BP  | 100                 |
| CDR35BP562B_ _ _                       | 562                     | 5600                    | F, J, K                      | BP  | 100                 |
| CDR35BP622B_ _ _                       | 622                     | 6200                    | F, J, K                      | BP  | 100                 |
| CDR35BP682B_ _ _                       | 682                     | 6800                    | F, J, K                      | BP  | 100                 |
| CDR35BP752B_ _ _                       | 752                     | 7500                    | F, J, K                      | BP  | 100                 |
| CDR35BP822B_ _ _                       | 822                     | 8200                    | F, J, K                      | BP  | 100                 |
| CDR35BP912B_ _ _                       | 912                     | 9100                    | F, J, K                      | BP  | 100                 |
| CDR35BP103B_ _ _                       | 103                     | 10 000                  | F, J, K                      | BP  | 100                 |
| CDR35BP113A_ _ _                       | 113                     | 11 000                  | F, J, K                      | BP  | 50                  |
| CDR35BP123A_ _ _                       | 123                     | 12 000                  | F, J, K                      | BP  | 50                  |
| CDR35BP133A_ _ _                       | 133                     | 13 000                  | F, J, K                      | BP  | 50                  |
| CDR35BP153A_ _ _                       | 153                     | 15 000                  | F, J, K                      | BP  | 50                  |
| CDR35BP163A_ _ _                       | 163                     | 16 000                  | F, J, K                      | BP  | 50                  |
| CDR35BP183A_ _ _                       | 183                     | 18 000                  | F, J, K                      | BP  | 50                  |
| CDR35BP203A_ _ _                       | 203                     | 20 000                  | F, J, K                      | BP  | 50                  |
| CDR35BP223A_ _ _                       | 223                     | 22 000                  | F, J, K                      | BP  | 50                  |



| MIL-C-55681 QUALIFIED, TYPE CDR |                  |                  |                       |                                      |              |
|---------------------------------|------------------|------------------|-----------------------|--------------------------------------|--------------|
| MILITARY TYPE DESIGNATION       | CAPACITANCE CODE | CAPACITANCE (pF) | CAPACITANCE TOLERANCE | RATED TEMP. AND VOLTAGE TEMP. LIMITS | VOLTAGE (DC) |
| <b>CDR35BX</b>                  |                  |                  |                       |                                      |              |
| CDR35BX563B_ _ _                | 563              | 56 000           | K, M                  | BX                                   | 100          |
| CDR35BX683B_ _ _                | 683              | 68 000           | K, M                  | BX                                   | 100          |
| CDR35BX823B_ _ _                | 823              | 82 000           | K, M                  | BX                                   | 100          |
| CDR35BX104B_ _ _                | 104              | 100 000          | K, M                  | BX                                   | 100          |
| CDR35BX124B_ _ _                | 124              | 120 000          | K, M                  | BX                                   | 100          |
| CDR35BX154B_ _ _                | 154              | 150 000          | K, M                  | BX                                   | 100          |
| CDR35BX184A_ _ _                | 184              | 180 000          | K, M                  | BX                                   | 50           |
| CDR35BX224A_ _ _                | 224              | 220 000          | K, M                  | BX                                   | 50           |
| CDR35BX274A_ _ _                | 274              | 270 000          | K, M                  | BX                                   | 50           |
| CDR35BX334A_ _ _                | 334              | 330 000          | K, M                  | BX                                   | 50           |
| CDR35BX394A_ _ _                | 394              | 390 000          | K, M                  | BX                                   | 50           |
| CDR35BX474A_ _ _                | 474              | 470 000          | K, M                  | BX                                   | 50           |

| TAPE AND REEL QUANTITIES (1)(2)(3) |           |           |                    |      |      |                                 |        |      |
|------------------------------------|-----------|-----------|--------------------|------|------|---------------------------------|--------|------|
| STYLES                             | BODY SIZE | TAPE SIZE | 7" REEL QUANTITIES |      |      | 11 1/4" AND 13" REEL QUANTITIES |        | BULK |
|                                    |           |           | PACKAGING CODE     |      |      | PACKAGING CODE                  |        |      |
|                                    |           |           | "C"                | "T"  | "J"  | "P"                             | "R"    |      |
| CDR01, CDR31                       | 0805      | 8 mm      | 3000               | 3000 | 1000 | 10 000                          | 10 000 | 100  |
| CDR32                              | 1206      | 8 mm      | n/a                | 3000 | 1000 | n/a                             | 10 000 | 100  |
| CDR33                              | 1210      | 8 mm      | n/a                | 3000 | 1000 | n/a                             | 10 000 | 100  |
| CDR02                              | 1805      | 12 mm     | n/a                | 3000 | 500  | n/a                             | 10 000 | 100  |
| CDR03                              | 1808      | 12 mm     | n/a                | 2000 | 500  | n/a                             | 10 000 | 100  |
| CDR04, CDR34                       | 1812      | 12 mm     | n/a                | 1000 | 500  | n/a                             | 4000   | 100  |
| CDR35                              | 1825      | 12 mm     | n/a                | 1000 | 500  | n/a                             | 4000   | 100  |
| CDR06                              | 2225      | 12 mm     | n/a                | 1000 | 500  | n/a                             | 4000   | 100  |

Notes

- (1) Vishay Vitramon uses embossed plastic carrier tape and punched paper carrier tape
- (2) Paper tape is not available for case sizes > 1206 or for component thickness > 0.035" (0.89 mm)
- (3) DC voltage rating should not be exceeded in application

| STORAGE AND HANDLING CONDITIONS   |
|---|
| <p>(1) Store the components at 5 °C to + 40 °C ambient temperature and ≤ 70 % related humidity conditions.</p> <p>(2) The product is recommended to be used within a time-frame of 2 years after shipment.<br/>Check solderability in case extended shelf life beyond the expiry date is needed.</p> <p>Precautions:</p> <ul style="list-style-type: none"> <li>a. Do not store products in an environment containing corrosive elements, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are present. This may cause corrosion or oxidization of the terminations, which can easily lead to poor soldering.</li> <li>b. Store products on the shelf and avoid exposure to moisture or dust.</li> <li>c. Do not expose products to excessive shock, vibration, direct sunlight and so on.</li> </ul> |



## Disclaimer

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## Material Category Policy

**Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.**

**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**