



# **SAP PART NUMBERING MANUAL**



# **SAP PART NUMBERING MANUAL**

## **VISHAY DALE FILM RESISTORS**



# VISHAY DALE FILM RESISTORS

## B / H

**SAP Part Number**  
**BBF20M5LF08**  
**BBMW210MLE08**

**SAP Description**  
**BBF 20.5M 15% F08**  
**BBMW 210M 15% E08 e3**

**NOTE: H SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS**

MODEL 3 or 4 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
<b>BAEW</b> <b>BAKW</b> <b>BBF</b> <b>BBFW</b> <b>BBM</b> <b>BBMW</b> <b>BBR</b> <b>BBRW</b> <b>BBV</b> <b>BFQ</b> <b>BFT</b> <b>BFW</b> <b>HAEW</b> <b>HAKW</b> <b>HBF</b> <b>HBFW</b> <b>HBM</b> <b>HBMW</b> <b>HBR</b> <b>HBRW</b> <b>HBV</b> <b>HFQ</b> <b>HFT</b> <b>HFV</b>	<b>K</b> = kilohms <b>M</b> = Megohms <b>G</b> = Gigohms  Check data sheet for available value range	<b>J</b> = $\pm 5\%$ <b>K</b> = $\pm 10\%$ <b>L</b> = $\pm 15\%$ <b>M</b> = $\pm 20\%$	<b>STANDARD LEADFREE CODES</b> <b>E08</b> = Foam pack, 5/ea rolled in Microfoam <b>STANDARD TIN/LEAD CODES</b> <b>F08</b> = Foam pack, 5/ea rolled in Microfoam <b>NON-STANDARD TIN/LEAD CODES</b> <b>F03</b> = Foam pack, 10/ea rolled in Microfoam <b>F06</b> = Foam pack, 1/ea rolled in Microfoam <b>J03</b> = Skin pack, 5 to 10 pcs on cardboard (vary with size) <b>M27</b> = Heat Seal pack, components wrapped in pink foam, sealed in a level "C" – water-vapor proof bag in a supplemental container, marking per MIL-STD-129. <b>S51</b> = Custom pack, per TPI	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS

## C6

**SAP Part Number**

C00006221KF6301CJ

C0000612R0J6302EA

**SAP Description**

C6 :6301 221K 1% CJ

C6 :6302 12 5% EA e3

MODEL	SIZE	VALUE	TOLERANCE	SPEC	PACKAGING
1 digit	5 digits	4 digits	1 digit	4 digits	2 digits
<b>C</b>	<b>00006 = 6</b>	<b>R = ohms K = kilohm M = Megohm</b>	<b>F = ±1% G = ±2% J = ±5% K = ±10%</b>	See FP/C6 Spec Codes	<p><b>STANDARD LEAD FREE CODES</b>  <b>EA</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim  <b>EK</b> = Bulk pack</p> <p><b>STANDARD TIN/LEAD CODES</b>  <b>CJ</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, 2-7/8" tape spacing, with leadtrim (RH3, 1,000pcs/reel)  <b>B8</b> = Bulk pack</p> <p><b>NON-STANDARD LEAD FREE CODES</b>  <b>EF</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim</p> <p><b>NON-STANDARD TIN/LEAD CODES</b>  <b>A5</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim  <b>CH</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (RH2, 750pcs/reel)  <b>CF</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (RH1, 500pcs/reel)  <b>LB</b> = Lacer pack (L05)  <b>KR</b> (K22) ammo pack available  <b>BF</b> (B14) bulk pack available  <b>F5</b> (F05) foam pack available  <b>CK</b> (R19), <b>RG</b> (R20), <b>RE</b> (R36), <b>RH</b> (R64), <b>R9</b> (R68), <b>WG</b> (RE4), <b>WF</b> (RE5), <b>R6</b> (RE6), <b>R7</b> (RE7), <b>R8</b> (RE8), <b>C2</b>, <b>C3</b>, <b>CB</b>, <b>M6</b>, <b>R4</b> reel pack available</p>

Note: C6 is an FP1 or FP32 with an Epoxy coating rather than the FP products normal Silicone coating.



# VISHAY DALE FILM RESISTORS

## CCF

**SAP Part Number**  
**CCF5015R0FKR36**  
**CCF6010K0FKE36**  
**CCF02221RFKE36**

**SAP Description**  
**CCF-50 15 1% T-1 R36**  
**CCF-60 10K 1% T-1 E36 e3**  
**CCF-2 221 1% T-1 E36 e3**

MODEL 3 digits	SIZE 2 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
<b>CCF</b>	<b>50</b> <b>60</b> <b>02 = 2</b>	<b>R = ohms</b> <b>K = kilohms</b> <b>M = Megohms</b>  Check data sheet for available value range  Note: 1% parts only available in E96 decade values and 5% parts only available in E24 decade values	<b>F = ±1%</b> <b>J = ±5%</b> (not for 60-size)	<b>K = ±100ppm/°C</b> (T-1) <b>H = ±50ppm/°C</b> (T-2, 50-size only)	<b>STANDARD LEADFREE CODES</b> <b>E36</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with lead trim <b>STANDARD TIN/LEAD CODES</b> <b>R36</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with lead trim	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS

## CMF (Industrial)

**SAP Part Number**  
**CMF50487K00BERE**  
**CMF0739R000JLEA**  
**CMF5549R900FKRE116**  
**CMF60332K00FKEA70**

**SAP Description**  
**CMF-50 487K .1% T-9 R36**  
**CMF-07 39 5% T-0 EA e3**  
**CMF-55-116 49.9 1% T-1 R36**  
**CMF-60-70 332K 1% T-1 EA e3**

MODEL 3 digits	SIZE 2 digits	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
<b>CMF</b>	<b>50</b> <b>55</b> <b>60</b> <b>65</b> <b>70</b> <b>07</b> <b>20</b>	<b>R</b> = ohms <b>K</b> = kilohms <b>M</b> = Megohms  Note: E24 decade values only for CMF07 and CMF20  Check data sheet for available value range	<b>A</b> = ±0.05% <b>B</b> = ±0.1% <b>C</b> = ±0.25% <b>D</b> = ±0.5% <b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5% <b>K</b> = ±10% <b>S</b> = Special  Note: 2% and 5% tolerances only for CMF07 and CMF20	<b>E</b> = ±25ppm/°C (T-9) <b>H</b> = ±50ppm/°C (T-2) <b>K</b> = ±100ppm/°C (T-1) <b>L</b> = ±150ppm/°C (T-0) <b>N</b> = ±200ppm/°C (T-00) <b>S</b> = Special	<b>STANDARD LEAD FREE CODES</b> <b>EA</b> = Reel pack (std taping, Full reel quantity) <b>EB</b> = Reel pack (std taping except 1,000pcs/reel) <b>EK</b> = Bulk pack  <b>STANDARD TIN/LEAD CODES</b> <b>RE</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36) <b>R6</b> = Reel pack (RE6, std taping except 1,000pcs/reel) <b>BF</b> = Bulk pack (B14) <b>CP</b> = Reel pack, 0.400" pitch, 2-7/8" tape spacing, with leadtrim (R55, std for -146 & -147)  <b>NON-STANDARD TIN/LEAD CODES</b> <b>KA</b> = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (K36) <b>RA</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) <b>RB</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) <b>RC</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) <b>RG</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) <b>RH</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64) <b>WF</b> = Reel pack (RE5, std taping except 500pcs/reel) <b>R7</b> = Reel pack (RE7, std taping except 1,500pcs/reel) <b>R8</b> = Reel pack (RE8, std taping except 2,000pcs/reel) <b>KB</b> (K55), <b>KE</b> (K81), <b>KJ</b> (K82) ammo pack available <b>BL</b> (B24), <b>B1</b> (B25), <b>B7</b> (B45), <b>B9</b> (B70), <b>MD</b> (M22), <b>MH</b> (M74), <b>MP</b> (M75) bulk pack available <b>LA</b> (L03) lacer pack available <b>M2</b> (M02), <b>M3</b> (M03), <b>M6</b> (M06), <b>M7</b> (M07), <b>ML</b> (M10), <b>MA</b> (M11), <b>MN</b> (M14), <b>MB</b> (M15) heat seal pack available <b>ME</b> (M23), <b>MG</b> (M24), <b>CM</b> (R16), <b>R5</b> (R18), <b>R3</b> (R33), <b>RF</b> (R48), <b>RK</b> (R50), <b>CE</b> (R62), <b>R9</b> (R68), <b>RL</b> (R74), <b>RQ</b> (RC9), <b>WG</b> (RE4), <b>CL</b> (RH5), <b>SA</b> (S09), <b>SD</b> (S18), <b>SS</b> (S20), <b>SQ</b> (S21), <b>SE</b> (S22), <b>SY</b> (S24) reel pack available <b>SP</b> (RK1) <b>SM</b> (S50), <b>SL</b> (S51) special pack available  <b>NON-STANDARD LEAD FREE CODES</b> <b>ER</b> (EK1), <b>EU</b> (E74) reel pack available	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard  <b>GENERAL USAGE</b> <b>DASH NUMBERS</b> <b>11</b> = 0.032" leadwire (65-size) <b>39</b> = Fusible (55-size) <b>64</b> = Fusible (60-size) <b>70</b> = Color banded, 5 bands (for ≤ 1 %) <b>80</b> = Color banded, 4 bands (for ≥ 2 %) <b>88</b> = HSD (for all sizes) <b>95</b> = 0.032" leadwire (60-size) <b>143</b> = Non-magnetic; (for all sizes) <b>146</b> = Flame retardant (65 & 70 sizes) <b>147</b> = Pulse withstanding (65 & 70 sizes) <b>170</b> = HSD and Color banded, 5 bands (for ≤ 1 %)



# VISHAY DALE FILM RESISTORS

## CMF (Military - RL)

**SAP Part Number**  
**RL20S301JR36**

**SAP Description**  
**CMF-20 300 5% T-00 RL20S301J R36**

MODEL 2 digits	SIZE 3 digits	VALUE 3 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
<b>RL</b>	<b>07S</b> <b>20S</b>	3-digit numeric code where the first two digits are the significant figures and the last digit is the multiplier. For values below 10 ohms, an "R" is used as a decimal placeholder.  (NOTE: P/N FORMAT PER MIL-PRF-22684)  Check data sheet for available value range	<b>G</b> = ±2% <b>J</b> = ±5%	<b>STANDARD TIN/LEAD CODES</b> <b>R36</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim <b>RE6</b> = Reel pack (std taping except 1,000pcs/reel) <b>B14</b> = Bulk pack <b>STANDARD TIN/LEAD SLDC CODES</b> <b>RSL</b> = Reel pack, std taping, SLDC <b>BSL</b> = Bulk pack, SLDC <b>NON-STANDARD TIN/LEAD CODES</b> <b>K36</b> = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim <b>R05</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim <b>R08</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim <b>R19</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim <b>R20</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim <b>R64</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim <b>RE5</b> = Reel pack (std taping except 500pcs/reel) <b>K55, K81, K82</b> ammo pack available <b>B24, B25, B45, B70, M22, M74, M75</b> bulk pack available <b>L03</b> lacer pack available <b>M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15</b> heat seal pack available <b>M23, M24, R16, R18, R33, R48, R50, R55, R62, R68, R74, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24</b> reel pack available <b>S50, S51</b> special pack available	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard  <b>GENERAL USAGE</b> <b>DASH NUMBERS</b> <b>88</b> = Hot Solder Dipped <b>143</b> = Non-magnetic



# VISHAY DALE FILM RESISTORS

## CMF (Military - RN)

**SAP Part Number**  
 RN55D3013FB14  
 RN65E1002BR36143

**SAP Description**  
 CMF-55 301K 1% T-1 RN55D3013F B14  
 CMF-65-143 10K .1% T-9 RN65E1002B R36

MODEL 2 digits	SIZE 2 digits	T.C. 1 digit	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
<b>RN</b>	<b>50</b> <b>55</b> <b>60</b> <b>65</b> <b>70</b>	<b>E</b> = ±25ppm/°C (T-9) <b>C</b> = ±50ppm/°C (T-2) <b>D</b> = ±100ppm/°C (T-1)	4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder.  (NOTE: P/N FORMAT PER MIL-R-10509)  Check data sheet for available value range	<b>B</b> = ±0.1% <b>C</b> = ±0.25% <b>D</b> = ±0.5% <b>F</b> = ±1%	<b>STANDARD TIN/LEAD CODES</b> <b>R36</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim <b>RE6</b> = Reel pack (std taping except 1,000pcs/reel) <b>B14</b> = Bulk pack <b>STANDARD TIN/LEAD SLDC CODES</b> <b>RSL</b> = Reel pack, std taping, SLDC <b>BSL</b> = Bulk pack, SLDC <b>NON-STANDARD TIN/LEAD CODES</b> <b>K36</b> = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim <b>R05</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim <b>R08</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim <b>R19</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim <b>R20</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim <b>R64</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim <b>RE5</b> = Reel pack (std taping except 500pcs/reel) <b>K55, K81, K82</b> ammo pack available <b>B24, B25, B45, B70, M22, M74, M75</b> bulk pack available <b>L03</b> lacer pack available <b>M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15</b> heat seal pack available <b>M23, M24, R16, R18, R33, R48, R50, R55, R62, R68, R74, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24</b> reel pack available <b>S50, S51</b> special pack available	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard  <b>GENERAL USAGE DASH NUMBERS</b> <b>88</b> = Hot Solder Dipped <b>143</b> = Non-magnetic





# VISHAY DALE FILM RESISTORS

## CPF

**SAP Part Number**

CPF1145R00DHR36  
 CPF360K400FKE36  
 CPF211R500FKEE66

**SAP Description**

CPF-1 145 .5% T-2 R36  
 CPF-3 60.4K 1% T-1 E36 e3  
 CPF-2-6 11.5 1% T-1 EE6 e3

MODEL 3 digits	SIZE 1 digit	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
<b>CPF</b>	<b>1</b> <b>2</b> <b>3</b>	<b>R</b> = ohms <b>K</b> = kilohms <b>M</b> = Megohms  Check data sheet for available value range	<b>B</b> = ±0.1% <b>C</b> = ±0.25% <b>D</b> = ±0.5% <b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5%	<b>E</b> = ±25ppm/°C (T-9) <b>H</b> = ±50ppm/°C (T-2) <b>K</b> = ±100ppm/°C (T-1) <b>L</b> = ±150ppm/°C (T-0) <b>N</b> = ±200ppm/°C (T-00)	<p><b>STANDARD LEAD FREE CODES</b>  <b>E36</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim  <b>EE6</b> = Reel pack (std taping except 1,000pcs/reel)  <b>E14</b> = Bulk pack</p> <p><b>STANDARD TIN/LEAD CODES</b>  <b>R36</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim  <b>RE6</b> = Reel pack (std taping except 1,000pcs/reel)  <b>B14</b> = Bulk pack</p> <p><b>NON-STANDARD TIN/LEAD CODES</b>  <b>K36</b> = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim  <b>R05</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim  <b>R08</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim  <b>R19</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim  <b>R20</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim  <b>R64</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim  <b>RE5</b> = Reel pack (std taping except 500pcs/reel)  <b>K55, K81, K82</b> ammo pack available  <b>B24, B25, B45, B70, M22, M74, M75</b> bulk pack available  <b>L03</b> lacer pack available  <b>M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15</b> heat seal pack available  <b>M23, M24, R16, R18, R33, R48, R50, R55, R62, R68, R74, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24</b> reel pack available  <b>S50, S51</b> special pack available  <b>EKA ( Pb-Free Ammo)= full 2500 pcs per box</b>  <b>KE6 (Pb-Bearing Ammo)</b>  <b>EK1 (Pb-Free Ammo)= 1K pcs per box</b></p> <p><b>NON-STANDARD LEAD-FREE CODES</b>  <b>E74</b> = Reel pack available</p>	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS

## CRCC

**SAP Part Number**  
**CRCC1206123F560KTF**  
**CRCC1206472J220MEA**

**SAP Description**  
**CRCC1206123F560K R02**  
**CRCC1206472J220M EA e3**

MODEL	SIZE	RESISTANCE VALUE	RESISTOR TOLERANCE	CAPACITANCE VALUE	CAPACITOR TOLERANCE	PACKAGING
4 digits <b>CRCC</b>	4 digits <b>1206</b>	3 digits 3-digit numeric code (in ohms) where the first two digits are the significant figures and the last digit is the multiplier.  Check data sheet for available value range	1 digit <b>F = ±1%</b> <b>G = ±2%</b> <b>J = ±5%</b>	3 digits 3-digit numeric code (in picofarads) where the first two digits are the significant figures and the last digit is the multiplier.  Check data sheet for available value range	1 digit <b>K = ±10%</b> <b>M = ±20%</b>	2 digit <b>STANDARD LEAD FREE CODES</b> <b>EA</b> = Reel pack, embossed carrier tape, 7" reel <b>STANDARD TIN/LEAD CODES</b> <b>TF</b> = Reel pack, embossed carrier tape, 7" reel (R02)



# VISHAY DALE FILM RESISTORS

## D / G

**SAP Part Number**

DPX40M2JB191  
 GPW250KLE19  
 DVY500MJB19V1

**SAP Description**

DPX-1 40.2M 5% B19  
 GPW 250K 15% E19 e3  
 DVY-V1 500M 5% B19

**NOTE: SP07 will convert Vinyl and Mylar sleeve options as “Specials”. For example: DVYV will show as DVY-V.**

MODEL	VALUE	TOLERANCE	PACKAGING	OPTIONAL CONSTRUCTION	SPECIAL
3 digits	4 digits	1 digit	3 digits	Up to 1 digit	Up to 3 digits
<b>DJU</b> <b>DPW</b> <b>DPX</b> <b>DVY</b> <b>DZW</b> <b>DZZ</b> <b>GJU</b> <b>GPW</b> <b>GPX</b> <b>GVY</b> <b>GZW</b> <b>GZZ</b>	<b>K</b> = kilohms <b>M</b> = Megohms <b>G</b> = Gigohms  Check data sheet for available value range	<b>J</b> = ±5% <b>K</b> = ±10% <b>L</b> = ±15% <b>M</b> = ±20%	<b>STANDARD LEAD FREE CODES</b> <b>E19*</b> = Bulk pack <b>E03*</b> = Skin pack <b>STANDARD TIN/LEAD CODES</b> <b>B19</b> = Bulk pack <b>J03</b> = Skin pack, 5 to 10 pcs on cardboard (vary with size) <b>F06</b> = Foam pack, 1/ea rolled in Microfoam <b>M27</b> = Heat Seal pack, components wrapped in pink foam, sealed in a level “C” – water-vapor proof bag in a supplemental container, marking per MIL-STD-129. <b>S51</b> = Custom pack, per TPI  * Leadfree version not currently released	<b>V</b> = Vinyl sleeve <b>M</b> = Mylar sleeve	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS

## DC

**SAP Part Number**  
 DC1/4436R2DR3618  
 DC1/8500K0FR3610

**SAP Description**  
 DC-1/4-18 436.2 .5% R36  
 DC-1/8-10 500K 1% R36

**NOTE: DC SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS**

MODEL 2 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
<b>DC</b>	<b>1/4</b> <b>1/8</b>	<b>R</b> = ohms <b>K</b> = kilohms <b>M</b> = Megohms  Check data sheet for available value range	<b>D</b> = $\pm 0.5\%$ <b>F</b> = $\pm 1\%$ <b>G</b> = $\pm 2\%$ <b>J</b> = $\pm 5\%$	<b>TIN/LEAD CODES</b> <b>R36</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim <b>RE4</b> = Reel pack (std taping except min of 300pcs/reel, multiple of 100pcs) <b>RE5</b> = Reel pack (std taping except 500pcs/reel) <b>RE6</b> = Reel pack (std taping except 1,000pcs/reel) <b>RE7</b> = Reel pack (std taping except 1,500pcs/reel) <b>RE8</b> = Reel pack (std taping except 2,000pcs/reel) <b>K36</b> = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS

## DCS

**SAP Part Number**  
DCS1/2135R0FR3615

**SAP Description**  
DCS-1/2-15 135 1% R36

**NOTE: DCS SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS**

MODEL 3 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
DCS	1/2	R = ohms K = kilohms M = Megohms  135R0 = 135 ohm	D = ±0.5% F = ±1% G = ±2% J = ±5%	TIN/LEAD CODES R36 = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim RE4 = Reel pack (std taping except min of 300pcs/reel, multiple of 100pcs) RE5 = Reel pack (std taping except 500pcs/reel) RE6 = Reel pack (std taping except 1,000pcs/reel) RE7 = Reel pack (std taping except 1,500pcs/reel) RE8 = Reel pack (std taping except 2,000pcs/reel)	Dash #'s 1 thru 999 as applicable  Blank = Standard



# VISHAY DALE FILM RESISTORS

## ERC (Military - RNC / RNR)

**SAP Part Number**  
**RNC55H1002FSR36**  
**RNC60J10R0FSRE6201**

**SAP Description**  
**ERC-55 10K 1% T-2 RNC55H1002FS R36**  
**ERC-55-201 10 1% T-9 RNC60J10R0FSR RE6**

MODEL 3 digits	SIZE 2 digits	T.C. 1 digit	VALUE 4 digits	TOLERANCE 1 digit	FAILURE RATE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
<b>RNC</b> <b>RNR</b>	<b>50</b> <b>55</b> <b>60</b> <b>65</b> <b>70</b>	<b>J</b> = $\pm 25$ ppm/ $^{\circ}$ C (T-9) <b>H</b> = $\pm 50$ ppm/ $^{\circ}$ C (T-2) <b>K</b> = $\pm 100$ ppm/ $^{\circ}$ C (T-1)	4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder.  (NOTE: P/N FORMAT PER MIL-PRF-55182)  Check data sheet for available value range	<b>B</b> = $\pm 0.1\%$ <b>D</b> = $\pm 0.5\%$ <b>F</b> = $\pm 1\%$	<b>M</b> = 1% <b>P</b> = 0.1% <b>R</b> = 0.01% <b>S</b> = 0.001%	<b>STANDARD TIN/LEAD CODES</b> <b>R36</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (std for 50, 55 & 60 sizes) <b>R64</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (std for 65 & 70 sizes) <b>RE6</b> = Reel pack (std taping except 1,000pcs/reel) <b>B14</b> = Bulk pack <b>STANDARD TIN/LEAD SLDC CODES</b> <b>RSL</b> = Reel pack, std taping, SLDC <b>BSL</b> = Bulk pack, SLDC <b>NON-STANDARD TIN/LEAD CODES</b> <b>R05</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim <b>R08</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim <b>R19</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim <b>R20</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim <b>RE5</b> = Reel pack (std taping except 500pcs/reel) <b>K36, K55, K81, K82, K83</b> ammo pack available <b>B24, B25, B45, B70, M22, M74, M75</b> bulk pack available <b>L03</b> lacer pack available <b>M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15</b> heat seal pack available <b>M23, M24, R16, R18, R33, R38, R48, R50, R55, R62, R68, R74, R93, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24</b> reel pack available <b>S50, S51</b> special pack available	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard  <b>GENERAL USAGE DASH NUMBERS</b> <b>4</b> = HSD (70-size) <b>31</b> = HSD (50-size) <b>65</b> = HSD (55 or 65-size) <b>201</b> = HSD (60-size)



# VISHAY DALE FILM RESISTORS

## ERC (Specials)

**SAP Part Number**  
**ERC50536R00FHR697**  
**ERC5510K000BER6122**

**SAP Description**  
**ERC-50-97 536 1% T-2 RE6**  
**ERC-55-122 10K .1% T-9 RE6**

**(Typically to Customer Source Control Drawings)**

MODEL 3 digits	SIZE 2 digits	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
<b>ERC</b>	<b>50</b> <b>55</b> <b>60</b> <b>65</b> <b>70</b>	<b>R</b> = ohms <b>K</b> = kilohms <b>M</b> = Megohms  Check data sheet for available value range	<b>A</b> = ±0.05% <b>B</b> = ±0.1% <b>C</b> = ±0.25% <b>D</b> = ±0.5% <b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5%	<b>Z</b> = ±5ppm/°C (T-16) <b>Y</b> = ±10ppm/°C (T-13) <b>X</b> = ±15ppm/°C (T-10) <b>E</b> = ±25ppm/°C (T-9) <b>H</b> = ±50ppm/°C (T-2) <b>K</b> = ±100ppm/°C (T-1)	<b>STANDARD LEAD FREE CODES</b> <b>EA</b> = Reel pack, 0.200" pitch, 2-1/16" (for 50, 55 & 60-sizes) or 2-7/8" (for 65 & 70-sizes) tape spacing, with leadtrim <b>EB</b> = Reel pack (std taping except 1,000pcs/reel) <b>EK</b> = Bulk pack <b>STANDARD TIN/LEAD CODES</b> <b>RE</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36, std for 50, 55 & 60-sizes) <b>RH</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64, std for 65 & 70-sizes) <b>R6</b> = Reel pack (RE6, std taping except 1,000pcs/reel) <b>BF</b> = Bulk pack (B14) <b>NON-STANDARD TIN/LEAD CODES</b> <b>RA</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) <b>RB</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) <b>RC</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) <b>RG</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) <b>WF</b> = Reel pack (RE5, std taping except 500pcs/reel) <b>KA</b> (K36), <b>KB</b> (K55), <b>KE</b> (K81), <b>KJ</b> (K82) ammo pack available <b>BL</b> (B24), <b>B1</b> (B25), <b>B7</b> (B45), <b>B9</b> (B70), <b>BS</b> (BSL), <b>MD</b> (M22), <b>MH</b> (M74), <b>MP</b> (M75) bulk pack available <b>LA</b> (L03) lacer pack available <b>M2</b> (M02), <b>M3</b> (M03), <b>M6</b> (M06), <b>M7</b> (M07), <b>ML</b> (M10), <b>MA</b> (M11), <b>MN</b> (M14), <b>MB</b> (M15) heat seal pack available <b>ME</b> (M23), <b>MG</b> (M24), <b>CM</b> (R16), <b>R5</b> (R18), <b>R3</b> (R33), <b>RF</b> (R48), <b>RK</b> (R50), <b>CP</b> (R55), <b>CE</b> (R62), <b>R9</b> (R68), <b>RL</b> (R74), <b>RQ</b> (RC9), <b>WG</b> (RE4), <b>R7</b> (RE7), <b>R8</b> (RE8), <b>CL</b> (RH5), <b>UL</b> (RSL), <b>SA</b> (S09), <b>SD</b> (S18), <b>SS</b> (S20), <b>SQ</b> (S21), <b>SE</b> (S22), <b>SY</b> (S24) reel pack available <b>SM</b> (S50), <b>SL</b> (S51) special pack available	Dash #'s 1 thru 999 as applicable



# VISHAY DALE FILM RESISTORS

## ERL (Military RLR)

**SAP Part Number**  
 RLR07C1002FSB14  
 RLR20C2152GRR3611

**SAP Description**  
 ERL-07 10K 1% T-1 RLR07C1002FS B14  
 ERL-20-11 21.5K 2% T-1 RLR20C2152GR R36

MODEL	SIZE	LEAD MATERIAL	VALUE	TOLERANCE	FAILURE RATE	PACKAGING	SPECIAL
3 digits	2 digits	1 digit	4 digits	1 digit	1 digit	3 digits	Up to 3 digits
<b>RLR</b>	<b>05</b> <b>07</b> <b>20</b> <b>32</b>	<b>C</b>	4-digit numeric code where the first three digits are the significant figures and the last digit is the multiplier. For values below 100 ohms, an "R" is used as a decimal placeholder.  (NOTE: P/N FORMAT PER MIL-PRF-39017)  Check data sheet for Available value range	<b>F</b> = ±1% <b>G</b> = ±2%	<b>M</b> = 1% <b>P</b> = 0.1% <b>R</b> = 0.01% <b>S</b> = 0.001%	<b>STANDARD TIN/LEAD CODES</b> <b>R36</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (std for 05, 07 & 20 sizes) <b>R64</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (std for 32 size) <b>RE6</b> = Reel pack (std taping except 1,000pcs/reel) <b>B14</b> = Bulk pack <b>STANDARD TIN/LEAD SLDC CODES</b> <b>RSL</b> = Reel pack, std taping, SLDC <b>BSL</b> = Bulk pack, SLDC <b>NON-STANDARD TIN/LEAD CODES</b> <b>R05</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim <b>R08</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim <b>R19</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim <b>R20</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim <b>RE5</b> = Reel pack (std taping except 500pcs/reel) <b>K36, K55, K81, K82, K83</b> ammo pack available <b>B24, B25, B45, B70, M22, M74, M75</b> bulk pack available <b>L03</b> lacer pack available <b>M02, M03, M04, M05, M06, M07, M10, M11, M12, M13, M14, M15</b> heat seal pack available <b>M23, M24, R16, R18, R33, R38, R48, R50, R55, R62, R68, R74, R93, RC9, RD1, RE4, RE7, RE8, RH5, S09, S18, S20, S21, S22, S24</b> reel pack available <b>S50, S51</b> special pack available	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard  <b>GENERAL USAGE DASH NUMBERS</b> <b>1</b> = HSD (32-size) <b>11</b> = HSD (20-size) <b>19</b> = HSD (05-size) <b>23</b> = HSD (07-size)





# VISHAY DALE FILM RESISTORS

## ERL (Specials)

**SAP Part Number**  
 ERL057R5000GKRE29  
 ERL071M6000GKRE32

**SAP Description**  
 ERL-05-29 .5 2% T-1 R36  
 ERL-07-32 1.6M 2% T-1 R36

(Typically to Customer Source Control Drawings)

MODEL 3 digits	SIZE 2 digits	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
<b>ERL</b>	<b>05</b> <b>07</b> <b>20</b> <b>32</b> <b>62</b>	R = ohms K = kilohms M = Megohms  Check data sheet for available value range	<b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5%	<b>H</b> = ±50ppm/°C (T-2) <b>K</b> = ±100ppm/°C (T-1) <b>L</b> = ±150ppm/°C (T-0) <b>N</b> = ±200ppm/°C (T-00)	<b>STANDARD LEAD FREE CODES</b> <b>EA</b> = Reel pack, pitch and tape spacing vary based on size, with leadtrim <b>EB</b> = Reel pack (std taping except 1,000pcs/reel) <b>EK</b> = Bulk pack <b>STANDARD TIN/LEAD CODES</b> <b>RE</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36, std for 05, 07 & 20-sizes) <b>RH</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64, std for 32-size) <b>CP</b> = Reel pack, 0.400" pitch, 2-7/8" tape spacing, with leadtrim, (R55, std for 62-size) <b>R6</b> = Reel pack (RE6, std taping except 1,000pcs/reel) <b>BF</b> = Bulk pack (B14) <b>NON-STANDARD TIN/LEAD CODES</b> <b>RA</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) <b>RB</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) <b>RC</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) <b>RG</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) <b>WF</b> = Reel pack (RE5, std taping except 500pcs/reel) <b>KA</b> (K36), <b>KB</b> (K55), <b>KE</b> (K81), <b>KJ</b> (K82) ammo pack available <b>BL</b> (B24), <b>B1</b> (B25), <b>B7</b> (B45), <b>B9</b> (B70), <b>BS</b> (BSL), <b>MD</b> (M22), <b>MH</b> (M74), <b>MP</b> (M75) bulk pack available <b>LA</b> (L03) lacer pack available <b>M2</b> (M02), <b>M3</b> (M03), <b>M6</b> (M06), <b>M7</b> (M07), <b>ML</b> (M10), <b>MA</b> (M11), <b>MN</b> (M14), <b>MB</b> (M15) heat seal pack available <b>ME</b> (M23), <b>MG</b> (M24), <b>CM</b> (R16), <b>R5</b> (R18), <b>R3</b> (R33), <b>RF</b> (R48), <b>RK</b> (R50), <b>CE</b> (R62), <b>R9</b> (R68), <b>RL</b> (R74), <b>RQ</b> (RC9), <b>WG</b> (RE4), <b>R7</b> (RE7), <b>R8</b> (RE8), <b>CL</b> (RH5), <b>UL</b> (RSL), <b>SA</b> (S09), <b>SD</b> (S18), <b>SS</b> (S20), <b>SQ</b> (S21), <b>SE</b> (S22), <b>SY</b> (S24) reel pack available <b>SM</b> (S50), <b>SL</b> (S51) special pack available	Dash #'s 1 thru 999 as applicable



# VISHAY DALE FILM RESISTORS

## FP

**SAP Part Number**

FP01/224R9F5605B8  
 FP0001374KF6201EK  
 FP003P300RG9303CH  
 FP1/2P32K7G5555EA

**SAP Description**

FP1/2 :5605 24.9 1% B8  
 FP1 :6201 374K 1% EK e3  
 FP3P :9303 300 2% RH2  
 FP1/2P :5555 32.7K 2% EA e3

MODEL 2 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	SPEC 4 digits	PACKAGING 2 digits
<b>FP</b>	<b>01/2 = 1/2</b> <b>0001 = 1</b> <b>0002 = 2</b> <b>0003 = 3</b> <b>0004 = 4</b> <b>0005 = 5</b> <b>0007 = 7</b> <b>0010 = 10</b> <b>0032 = 32</b> <b>0042 = 42</b> <b>0067 = 67</b> <b>0069 = 69</b> <b>1/2P = 1/2P</b> <b>001P = 1P</b> <b>002P = 2P</b> <b>003P = 3P</b> <b>069P = 69P</b> <b>001D = 1D</b> <b>42TX</b>	<b>R = ohms</b> <b>K = kilohms</b> <b>M = Megohms</b>  Check data sheet for available value range	<b>F = ±1%</b> <b>G = ±2%</b> <b>J = ±5%</b> <b>K = ±10%</b>	See FP/C6 Spec Codes	<b>STANDARD LEAD FREE CODES</b> <b>EA</b> = Reel pack, pitch and tape spacing vary based on size, with leadtrim <b>EK</b> = Bulk pack <b>EL</b> = Lacer pack <b>STANDARD TIN/LEAD CODES</b> <b>CJ</b> = Reel pack, pitch varies based on size, 2-7/8" tape spacing, with leadtrim (RH3, 1,000pcs/reel, for 1/2, 1, 32 & 69-sizes) <b>CH</b> = Reel pack, pitch varies based on size, 2-7/8" tape spacing, with leadtrim (RH2, 750pcs/reel, for 1/2, 1, 2, 3, 32, 42, 67 & 69-sizes) <b>G1</b> = Reel pack, 0.400" pitch, 4" tape spacing, with leadtrim, with leadtrim (600 pcs/reel, for 4-size only) <b>B8</b> = Bulk pack <b>LB</b> = Lacer pack (L05) <b>NON-STANDARD LEAD FREE CODES</b> <b>EF</b> = Reel pack, pitch varies based on size, 2-1/16" tape spacing, with leadtrim <b>NON-STANDARD TIN/LEAD CODES</b> <b>A5</b> = Reel pack, pitch varies based on size, 2-1/16" tape spacing, with leadtrim <b>CF</b> = Reel pack, pitch varies based on size, 2-7/8" tape spacing, with leadtrim (RH1, 500 pcs/reel) <b>K4 (K04), KR (K22), KB (K55)</b> ammo pack available <b>BF (B14)</b> bulk pack available <b>F5 (F05)</b> foam pack available <b>MK (M8), CM (R16), CK (R19 or RH4), RG (R20), RE (R36), RK (R50), RH (R64), CR (R66), R9 (R68), WG (RE4), WF (RE5), R6 (RE6), R7 (RE7), R8 (RE8), C2, C3, CB, M6, N2, N3, NB, NC, R4 (27)</b> reel pack available



# VISHAY DALE FILM RESISTORS

## FRJ

**SAP Part Number**

FRJ55R36  
FRJ50E36

**SAP Description**

FRJ-55 R36  
FRJ-50 E36 e3

NOTE: FRJ55 SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

<b>MODEL</b> 3 digits	<b>SIZE</b> 2 digits	<b>VALUE</b> 0 digits	<b>PACKAGING</b> 3 digits	<b>SPECIAL</b> Up to 3 digits
<b>FRJ</b>	<b>50</b> <b>55</b>	This is a jumper, No value is needed	<b>STANDARD LEADFREE CODES</b> E36 = Reel pack,0.200" pitch, 2-1/16" tape spacing, with lead trim <b>STANDARD TIN/LEAD CODES</b> R36 = Reel pack,0.200" pitch, 2-1/16" tape spacing, with lead trim	Dash #'s 1 thru 999 as applicable  <b>Blank = Standard</b>



# VISHAY DALE FILM RESISTORS

## MVW / HVW / HVX

**SAP Part Number**  
**MVW3/4150K0KLB**  
**HVW002150K0KLB**  
**HVX00126K40MEL**

**SAP Description**  
**MVW-3/4 150K 10% L05**  
**HVW-2 150K 10% L05**  
**HVX-1 26.4K 20% EL e3**

MODEL 3 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
<b>MVW</b> <b>HVW</b> <b>HVX</b>	<b>1/2</b> <b>3/4</b> <b>001 (HVW &amp; HVX only)</b> <b>002 (HVW &amp; HVX only)</b>	<b>K</b> = kilohms <b>M</b> = Megohms  Check data sheet for available value range	<b>J</b> = ±5% <b>K</b> = ±10% <b>M</b> = ±20%	<b>STANDARD LEAD FREE CODES (HVW &amp; HVX only)</b> <b>EK</b> = Bulk pack, big box (1/2 & 3/4 sizes only) <b>EL</b> = Lacer pack <b>EE</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (1/2 & 3/4 sizes only) <b>STANDARD CODES *</b> <b>BJ</b> = Bulk pack, big box (B21, 1/2 & 3/4 sizes only) <b>LB</b> = Lacer pack (L05) <b>RC</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19, 1/2 & 3/4 sizes only) <b>NON-STANDARD CODES *</b> <b>BK</b> = Bulk pack, small box (B22) <b>RA</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) <b>RB</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) <b>RE</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36) <b>RG</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) <b>RH</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64) <b>R6</b> = Reel pack (RE6, std taping except 1,000pcs/reel) <b>SL</b> = Custom pack, per TPI (S51) <b>B8, BF</b> (B14) bulk pack available <b>RD</b> (R35), <b>RF</b> (R48), <b>CR</b> (R66), <b>RR</b> (RD5), <b>WF</b> (RE5) reel pack available  * MVW product is Pb-free, HVW & HVX product is Pb-bearing	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS

## PES

SAP Part Number  
PES1/41K00FKBF

SAP Description  
PES-1/4 1K 1% T-1 B14

MODEL 3 digits	SIZE 3 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits
<b>PES</b>	<b>1/4</b>	<b>R = ohms</b> <b>K = kilohms</b> <b>M = Megohms</b>  Check data sheet for available value range	<b>F = ±1%</b> <b>G = ±2%</b> <b>J = ±5%</b>	<b>H = ±50ppm/°C</b> (T-2) <b>K = ±100ppm/°C</b> (T-1)	<b>STANDARD LEAD FREE CODES</b> <b>EK = Bulk pack</b> <b>STANDARD TIN/LEAD CODES</b> <b>BF = Bulk pack (B14)</b>



# VISHAY DALE FILM RESISTORS

## PMCI

**SAP Part Number**  
**PMCI0580G0GS51**  
**PMCI0220G0KE02**

**SAP Description**  
**PMCI-5 80G 2% S51**  
**PMCI-2 20G 10% E02 e3**

MODEL 4 digits	TYPE 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits
<b>PMCI</b>	<b>01 = 1</b> <b>02 = 2</b> etc...	<b>R = ohms</b> <b>K = kilohms</b> <b>M = MILLION</b> <b>G = Gigohms</b>  Check data sheet for available value range	<b>F = ±1%</b> <b>G = ±2%</b> <b>J = ±5%</b> <b>K = ±10%</b> <b>L = ±15%</b> <b>M = ±20%</b>	<b>STANDARD LEADFREE CODES*</b> <b>E02 = Foam pack</b> <b>STANDARD TIN/LEAD CODES</b> <b>F02 = Foam pack</b> <b>NON-STANDARD TIN/LEAD CODES</b> <b>B23 = Bulk pack</b> <b>F05 = Foam pack, 5/ea rolled diagonally in Microfoam</b> <b>F06 = Foam pack, 1/ea rolled in Microfoam</b> <b>F08 = Foam pack, 5/ea rolled in Microfoam</b> <b>S51 = Custom pack, per TPI</b>  * Lead free version currently not released



# VISHAY DALE FILM RESISTORS

## PMMO

**SAP Part Number**  
**PMMO10500KFBC**  
**PMMO381G32FBB**

**SAP Description**  
**PMMO-10 500K 1% F05**  
**PMMO-38 1.32G 1% B23**

MODEL 4 digits	TYPE 2 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits
<b>PMMO</b>	<b>10</b> <b>18</b> <b>19</b> <b>20</b> <b>38</b>	<b>R</b> = ohms <b>K</b> = kilohms <b>M</b> = Megohms <b>G</b> = Gigohms  Check data sheet for available value range	<b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5% <b>K</b> = ±10% <b>L</b> = ±15% <b>M</b> = ±20%	<b>STANDARD LEADFREE CODES*</b> <b>EM</b> = Foam pack, 5/ea rolled diagonally in Microfoam <b>STANDARD TIN/LEAD CODES</b> <b>BC</b> = Foam pack, 5/ea rolled diagonally in Microfoam (F05) <b>NON-STANDARD TIN/LEAD CODES</b> <b>BB</b> = Bulk pack (B23) <b>ML</b> = Heat Seal pack (M10)  * Leadfree version not currently released



# VISHAY DALE FILM RESISTORS

## PSF

**SAP Part Number**  
 PSF201238R30QXTA  
 PSF452720K00FZEA  
 PSF20121K000AYBA1

**SAP Description**  
 PSF2012 38.3 .02% T-10 R86  
 PSF4527 20K 1% T-16 EA e3  
 PSF2012-1 1K .05% T-13 B43

MODEL 3 digits	SIZE 4 digits	VALUE 5 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 2 digits
PSF	2012 4527	R = ohms K = kilohms  Check data sheet for Available value range	T = ±0.01% Q = ±0.02% P = ±0.025% A = ±0.05% B = ±0.1% C = ±0.25% D = ±0.5% F = ±1%	Z = ±5ppm/°C (T-16) Y = ±10ppm/°C (T-13) X = ±15ppm/°C (T10) E = ±25ppm/°C (T-9) 0 = Special, per TPI	<b>STANDARD LEADFREE CODES</b> EA = Reel pack, Embossed carrier tape, 13" reel EB = Reel pack, Embossed carrier tape, 13" reel (std taping except 1,000pcs/reel) EK = Bulk pack, plastic bag <b>STANDARD TIN/LEAD CODES</b> TA = Reel pack, Embossed carrier tape, 13" reel (R86) TB = Reel pack, Embossed carrier tape, 13" reel (R79, std taping except 1,000pcs/reel) BA = Bulk pack, plastic bag (B43) <b>NON-STANDARD TIN/LEAD CODES</b> SB = Custom pack, per TPI (S51)	Dash #'s 1 thru 99 as applicable  <b>Blank</b> = Standard





# VISHAY DALE FILM RESISTORS

## PTF

**SAP Part Number**  
**PTF5624K060QZBF**  
**PTF65698K00AYEA**

**SAP Description**  
**PTF-56 24.06K .02% T-16 B14**  
**PTF-65 698K .05% T-13 EA e3**

MODEL 3 digits	SIZE 2 digits	VALUE 6 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
<b>PTF</b>	<b>51</b> <b>56</b> <b>65</b>	<b>R</b> = ohms <b>K</b> = kilohms <b>M</b> = Megohms  Check data sheet for available value range	<b>T</b> = ±0.01 <b>Q</b> = ±0.02 <b>P</b> = ±0.025 <b>A</b> = ±0.05 <b>B</b> = ±0.1% <b>C</b> = ±0.25% <b>D</b> = ±0.5% <b>F</b> = ±1%	<b>Z</b> = ±5ppm/°C (T-16) <b>Y</b> = ±10ppm/°C (T-13) <b>X</b> = ±15ppm/°C (T-10) <b>0</b> = Special, see TPI	<b>STANDARD LEAD FREE CODES</b> <b>EA</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim <b>EB</b> = Reel pack (std taping except 1,000pcs/reel) <b>EK</b> = Bulk pack <b>STANDARD TIN/LEAD CODES</b> <b>RE</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (R36) <b>R6</b> = Reel pack (RE6, std taping except 1,000pcs/reel) <b>BF</b> = Bulk pack (B14) <b>NON-STANDARD TIN/LEAD CODES</b> <b>KA</b> = Ammo pack, 0.200" pitch, 2-1/16" tape spacing, with leadtrim (K36) <b>RA</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, no leadtrim (R05) <b>RB</b> = Reel pack, 0.200" pitch, 2-1/16" tape spacing, no leadtrim (R08) <b>RC</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) <b>RG</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, with leadtrim (R20) <b>RH</b> = Reel pack, 0.200" pitch, 2-7/8" tape spacing, with leadtrim (R64) <b>WF</b> = Reel pack (RE5, std taping except 500pcs/reel) <b>KB</b> (K55), <b>KE</b> (K81), <b>KJ</b> (K82) ammo pack available <b>BL</b> (B24), <b>B1</b> (B25), <b>B7</b> (B45), <b>B9</b> (B70), <b>BS</b> (BSL), <b>MD</b> (M22), <b>MH</b> (M74), <b>MP</b> (M75) bulk pack available <b>LA</b> (L03) lacer pack available <b>M2</b> (M02), <b>M3</b> (M03), <b>M6</b> (M06), <b>M7</b> (M07), <b>ML</b> (M10), <b>MA</b> (M11), <b>MN</b> (M14), <b>MB</b> (M15) heat seal pack available <b>ME</b> (M23), <b>MG</b> (M24), <b>CM</b> (R16), <b>R5</b> (R18), <b>R3</b> (R33), <b>RF</b> (R48), <b>RK</b> (R50), <b>CP</b> (R55), <b>CE</b> (R62), <b>R9</b> (R68), <b>RL</b> (R74), <b>RQ</b> (RC9), <b>WG</b> (RE4), <b>R7</b> (RE7), <b>R8</b> (RE8), <b>CL</b> (RH5), <b>UL</b> (RSL), <b>SA</b> (S09), <b>SD</b> (S18), <b>SS</b> (S20), <b>SQ</b> (S21), <b>SE</b> (S22), <b>SY</b> (S24) reel pack available <b>SM</b> (S50), <b>SL</b> (S51) special pack available	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS

## RC

**SAP Part Number**  
 RC057510R0JMWB  
 RC11001K32FKTP20

**SAP Description**  
 RC-575 10 5% M T03  
 RC-1100-20 1.32K 1% K R01

**NOTE: RC SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS**

MODEL 2 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 2 digits
<b>RC</b>	<b>0540</b> <b>0550</b> <b>0575</b> <b>1100</b> <b>1206</b> <b>2010</b> <b>2512</b> <b>5100</b> <b>5150</b> <b>7225</b>	<b>R</b> = ohms <b>K</b> = kilohms <b>M</b> = Megohms	<b>C</b> = $\pm 0.25\%$ <b>D</b> = $\pm 0.5\%$ <b>F</b> = $\pm 1\%$ <b>G</b> = $\pm 2\%$ <b>J</b> = $\pm 5\%$ <b>K</b> = $\pm 10\%$ <b>M</b> = $\pm 20\%$	<b>E</b> = $\pm 25\text{ppm}/^\circ\text{C}$ <b>H</b> = $\pm 50\text{ppm}/^\circ\text{C}$ <b>K</b> = $\pm 100\text{ppm}/^\circ\text{C}$ <b>L</b> = $\pm 150\text{ppm}/^\circ\text{C}$ <b>N</b> = $\pm 200\text{ppm}/^\circ\text{C}$ <b>M</b> = $\pm 300\text{ppm}/^\circ\text{C}$ <b>P</b> = $\pm 500\text{ppm}/^\circ\text{C}$ <b>S</b> = Special	<b>STANDARD TIN/LEAD CODES</b> <b>TP</b> = Reel pack, Embossed carrier tape, 7" reel (R01) <b>S3</b> = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) <b>S2</b> = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) <b>S6</b> = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) <b>WB</b> = Tray pack (T03) <b>NON-STANDARD TIN/LEAD CODES</b> <b>TN</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) <b>SV</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) <b>SU</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) <b>ST</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) <b>WA</b> = Tray pack, w/ESD (M18) <b>BC</b> (P19), <b>BB</b> (P23) bulk pack available <b>TU</b> (R87), <b>TT</b> (RT4), <b>SW</b> (S79), <b>SX</b> (S80), <b>S4</b> (S85), <b>S5</b> (S86), <b>S1</b> (S87) reel pack available <b>T1</b> (T09), <b>T2</b> (T15), <b>T3</b> (T16), <b>T4</b> (T17) tray pack available <b>SL</b> (S51) special pack available	Dash #'s 01 thru 99 as applicable  <b>Blank</b> = Solder pre-tinned (standard)  <b>GENERAL USAGE DASH NUMBERS</b> <b>20</b> = Gold termination <b>40</b> = Platinum Gold termination <b>42</b> = Palladium Silver termination



# VISHAY DRALORIC FILM RESISTORS

## RCA

SAP Part Number

SAP Description

RCA080510K0FKTA (Part number for RCA0805 10K Ohm, 1%, 100PPM, RT1 Package)

MODEL	SIZE	VALUE	TOLERANCE	T.C	PACKAGING	SPECIAL
3 digits	4 digits	4 digits	1 digit	1 digit	2 digits	Up to 2 digits
RCA	0201 0402 0603 0805 1206 1210 1218 2010 2512	R = decimal K = thousand M = million 1K32 = 1,320 ohm 10R0 = 10 ohm 0000 = Jumper Check datasheet for available value range	C = $\pm 0.25\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ H = $\pm 3.0\%$ J = $\pm 5.0\%$ K = $\pm 10.0\%$ L = $\pm 15.0\%$ W = +0%, -30% Z = Zero Ohm Jump	E = 25 PPM H = 50PPM K = 100PPM L = 150 PPM N = 200 PPM M = 300 PPM P = 500 PPM Q = 400 PPM T = 600 PPM V = 2000 PPM W = 4000 PPM S = SPECIAL	TA = RT1 (reel) TB = RT5 (reel) TC = RT6 (reel) TD = RT7 (reel) TE = RF4 (reel) TF = R02 (reel) TG = R67 (reel) TH = R82 (reel) TJ = RT8 (reel) TK = RT9 (reel) BA = B27 (cassette) TX = R56 (reel)	NA = UNTRIMMED P = PRECISION TR = CUSTOMER TRIMMABLE IF = PULSE NUMERIC 01 THRU 99 TBD



# VISHAY DALE FILM RESISTORS

## RCP

**SAP Part Number**  
 RCP1206B10R0GS6  
 RCP1206B3K30GTP  
 RCP1206W1K00JEA

**SAP Description**  
 RCP1206B 10 2% S82  
 RCP1206B 3.3K G% R01  
 RCP1206W 1K 5% EA e3

MODEL	SIZE	BOTTOM TERM.	VALUE	TOLERANCE	PACKAGING	SPECIAL
3 digits	4 digits	1 digit	4 digits	1 digit	2 digits	Up to 3 digits
<b>RCP</b>	<b>1206</b>	<b>W</b> = Wide <b>B</b> = Traditional	<b>R</b> = ohms  <b>K</b> = kilohms  Check data sheet for available value range	<b>F</b> = $\pm 1\%$  <b>G</b> = $\pm 2\%$  <b>J</b> = $\pm 5\%$  <b>K</b> = $\pm 10\%$  <b>M</b> = $\pm 20\%$	<b>STANDARD LEADFREE CODES</b> <b>EA</b> = Reel pack, Embossed carrier tape, 7" reel <b>EB</b> = Reel pack, Embossed carrier tape, 7" reel (std taping except 1,000pcs/reel) <b>EC</b> = Reel pack, Embossed carrier tape, 7" reel (std taping except 500pcs/reel) <b>ED</b> = Reel pack, Embossed carrier tape, 7" reel (std taping except 300 pcs/reel) <b>ET</b> = Tray pack <b>ES</b> = Tape Reel (E51) Package per TPI  <b>STANDARD TIN/LEAD CODES</b> <b>TP</b> = Reel pack, Embossed carrier tape, 7" reel (R01) <b>S3</b> = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) <b>S2</b> = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) <b>S6</b> = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) <b>WB</b> = Tray pack (T03)  <b>NON-STANDARD TIN/LEAD CODES</b> <b>TN</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) <b>SV</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) <b>SU</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) <b>ST</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) <b>WA</b> = Tray pack, w/ESD (M18) <b>BC</b> (P19), <b>BB</b> (P23) bulk pack available <b>TU</b> (R87), <b>TT</b> (RT4), <b>SW</b> (S79), <b>SX</b> (S80), <b>S4</b> (S85), <b>S5</b> (S86), <b>S1</b> (S87), <b>UA</b> , <b>UB</b> , <b>UC</b> , <b>UD</b> , <b>UE</b> reel pack available <b>T1</b> (T09), <b>T2</b> (T15), <b>T3</b> (T16), <b>T4</b> (T17) tray pack available <b>SL</b> (S51) special pack available	Dash #'s 1 thru 999 as applicable <b>Blank</b> = standard



# VISHAY DALE FILM RESISTORS

## RCWPM (Military M/D55342 Thick Film)

**SAP Part Number**

M55342K09B10D0RTP  
M55342K06B10E0RWB2  
M55342M10B33H0PS3  
D55342K07B2P70TWBT

**SAP Description**

RCWPM-2512 10 1% K M55342K09B10D0R R01  
RCWPM-575-20 10K 1% K M55342K06B10E0R T03  
RCWPM-1100 33K 2% M M55342M10B33H0P S83  
RCWPM-1206-98 2.7M 10% M D55342K07B2P70T T03

MILITARY STYLE 6 digits	CHAR. 1 digit	MIL. SPEC. SHEET 2 digits	TERMINATION 1 digit	VALUE & TOL. 4 digits	FAILURE RATE 1 digit	PACKAGING 2 digits	SUFFIX 1 digit
M55342 D55342	K = ±100ppm/°C L = ±200ppm/°C M = ±300ppm/°C	01 = 0502 02 = 0550 03 = 5100 04 = 5150 05 = 7225 06 = 0575 07 = 1206 08 = 2010 09 = 2512 10 = 1100 11 = 0402 12 = 0603 13 = 0302	B = Pre-tinned Nickel Barrier, wraparound	Per std. Mil. Spec.  Check data sheet for available value range	C = Non-ER M = 1% P = 0.1% R = 0.01% S = 0.001% T = Space level U = 0.01% w/ Group A & B testing/Lot V = 0.001% w/ Group A & B testing/Lot	<b>STANDARD TIN/LEAD CODES</b> <b>TP</b> = Reel pack, Embossed carrier tape, 7" reel (R01) <b>S3</b> = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) <b>S2</b> = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) <b>S6</b> = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) <b>TN</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) <b>SV</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) <b>SU</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) <b>ST</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) <b>WB</b> = Tray pack (T03) <b>WA</b> = Tray pack, w/ESD (M18) <b>STANDARD TIN/LEAD SLDC CODES</b> <b>UL</b> = Reel pack, Embossed carrier tape, 7" reel, std taping, SLDC <b>U5</b> = Reel pack, Embossed carrier Tape, 7" reel, SLDC (std taping except 500 pcs/reel). <b>WL</b> = Tray pack, SLDC <b>NON-STANDARD TIN/LEAD CODES</b> <b>BC</b> (P19), <b>BB</b> (P23) bulk pack available <b>TU</b> (R87), <b>TT</b> (RT4), <b>SX</b> (S80), <b>S4</b> (S85), <b>S5</b> (S86), <b>S1</b> (S87), <b>UA</b> , <b>UB</b> , <b>UC</b> , <b>UD</b> , <b>UE</b> reel pack available <b>T1</b> (T09), <b>T2</b> (T15), <b>T3</b> (T16), <b>T4</b> (T17) pack available	0 thru 9 or A thru Z as applicable  Blank = Standard  <b>GENERAL USAGE DASH NUMBERS</b> <b>T</b> = "T" space level (-98) <b>S</b> = "T" space level, Part marking to MIL spec Option 1 (-97) <b>2</b> = Part marking to MIL spec Option 1 (-20) <b>3</b> = Part marking to MIL spec Options 2 and 3 (-30)



# VISHAY DALE FILM RESISTORS

## RCW

**SAP Part Number**  
 RCW057510R0JMWB42  
 RCW11001K32FKTP40

**SAP Description**  
 RCW-575-42 10 5% M T03  
 RCW-1100-40 1.32K 1% K R01

NOTE: RCW SERIES NO LONGER MANUFACTURED, AVAILABLE ONLY IF INVENTORY EXISTS

MODEL 3 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL 2 digits
RCW	0540	R = ohms	C = ±0.25%	E = ±25ppm/°C	<b>STANDARD TIN/LEAD CODES</b> <b>TP</b> = Reel pack, Embossed carrier tape, 7" reel (R01) <b>S3</b> = Reel pack, Embossed carrier tape, 7" reel (S84, std tapping except 1,000 pcs/reel) <b>S2</b> = Reel pack, Embossed carrier tape, 7" reel (S83, std tapping except 500 pcs/reel) <b>S6</b> = Reel pack, Embossed carrier tape, 7" reel (S82, std tapping except 300 pcs/reel) <b>WB</b> = Tray pack (T03) <b>NON-STANDARD TIN/LEAD CODES</b> <b>TN</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) <b>SV</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std tapping except 1,000 pcs/reel) <b>SU</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std tapping except 500 pcs/reel) <b>ST</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std tapping except 300 pcs/reel) <b>WA</b> = Tray pack, w/ESD (M18) <b>BC</b> (P19), <b>BB</b> (P23) bulk pack available <b>TU</b> (R87), <b>TT</b> (RT4), <b>SW</b> (S79), <b>SX</b> (S80), <b>S4</b> (S85), <b>S5</b> (S86), <b>S1</b> (S87) reel pack available <b>T1</b> (T09), <b>T2</b> (T15), <b>T3</b> (T16), <b>T4</b> (T17) tray pack available <b>SL</b> (S51) special pack available	Dash #'s 01 thru 99 as applicable  <b>GENERAL USAGE DASH NUMBERS</b> <b>40</b> = Platinum Gold termination <b>42</b> = Palladium Silver termination
	0550	K = kilohms	D = ±0.5%	H = ±50ppm/°C		
	0575	M = Megohms	F = ±1%	K = ±100ppm/°C		
	1100		G = ±2%	L = ±150ppm/°C		
	1206		J = ±5%	N = ±200ppm/°C		
	2010		K = ±10%	M = ±300ppm/°C		
	2512		M = ±20%	P = ±500ppm/°C		
	5100			S = Special		
	5150					
	7225					



# VISHAY DALE FILM RESISTORS

## RCWE

### SAP Part Number

RCWE080530L1FKEA

RCWE2512R470JKTA

### SAP Description

RCWE-0805 .0301 1% 100PPM EA e3

RCWE-2512 .47 5% 100PPM TA

MODEL 4 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL 2 digits
RCWE	0402 0603 0612 0805 1020 1206 1210 1218 2010 2512	R = decimal L = milliohm (use L below 0.1 ohm) Examples: R180 = .18 ohm R301 = .301 ohm 20L0 = .020 ohm Check data sheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$	K = 100 PPM N = 200 PPM M = 300 PPM Q = 400 PPM T = 600 PPM G = 700 PPM R = 250 PPM	<b>STD LEADFREE CODES</b> EA = 7" Reel (0402 thru 2512) <b>STD TIN / LEAD CODES</b> TA = 7" Reel (0402 thru 2512) <b>NON-STD LEADFREE CODES</b> EB = 11.25" Reel (0402 thru 1206) EC = 13" Reel (0402 thru 1206) ED = 7" Reel, 4mm pitch (2512 only) EI = Plastic tape (1206 only) <b>NON-STD TIN / LEAD CODES</b> TB = 11.25" Reel (0402 thru 1206) TC = 13" Reel (0402 thru 1206) TD = 7" Reel, 4mm pitch (2512 only)	Dash #'s 01 thru 99 as applicable



# VISHAY DALE FILM RESISTORS

## RCWH

### SAP Part Number

RCWH080530L1FKEA

### SAP Description

RCWH-0805 .0301 1% 100PPM EA e3

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	SPECIAL
4 digits	4 digits	4 digits	1 digit	1 digit	2 digits	2 digits
RCWH	0402 0603 0612 0805 1020 1206 1210 1218 2010 2512	R = decimal L = milliohm (use L below 0.1 ohm) Examples: R180 = .18 ohm R301 = .301 ohm 20L0 = .020 ohm  Check data sheet for available value range	D = $\pm 0.5\%$ F = $\pm 1.0\%$ G = $\pm 2.0\%$ J = $\pm 5.0\%$	K = 100 PPM N = 200 PPM M = 300 PPM Q = 400 PPM T = 600 PPM G = 700 PPM R = 250 PPM	<b>STD LEADFREE CODES</b> EA = 7" Reel (0402 thru 2512) <b>STD TIN / LEAD CODES</b> TA = 7" Reel (0402 thru 2512) <b>NON-STD LEADFREE CODES</b> EB = 11.25" Reel (0402 thru 1206) EC = 13" Reel (0402 thru 1206) ED = 7" Reel, 4mm pitch (2512 only) EI = Plastic tape (1206 only) <b>NON-STD TIN / LEAD CODES</b> TB = 11.25" Reel (0402 thru 1206) TC = 13" Reel (0402 thru 1206) TD = 7" Reel, 4mm pitch (2512 only)	Dash #'s 01 thru 99 as applicable





# VISHAY DALE FILM RESISTORS

## RCWK

**SAP Part Number**

RCWK060630L1FHEA

RCWK060647L0DHTA

**SAP Description**

RCWK-0606 .0301 1% 50PPM EA e3

RCWK-0606 .047 0.5% 50PPM TA

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	SPECIAL
4 digits	4 digits	4 digits	1 digit	1 digit	2 digits	2 digits
RCWK	0306 0606	L = milliohm (use L below 0.1 ohm)  Examples: 30L1 = .0301 ohm 20L0 = .020 ohm  Check data sheet for available value range	D = ±0.5% F = ±1.0%	H = 50 PPM M = 300 PPM	<b>STD LEADFREE CODES</b> EA = 7" Reel <b>STD TIN / LEAD CODES</b> TA = 7" Reel	Dash #'s 01 thru 99 as applicable



# VISHAY DALE FILM RESISTORS

## RCWL

### SAP Part Number

RCWL1206R180JMEA  
 RCWL0805R499FMEC  
 RCWL2512R270JNTA

### SAP Description

RCWL-1206 .18 5% 300PPM EA e3  
 RCWL-0805 .499 1% 300PPM EC e3  
 RCWL-2512 .27 5% 200PPM TA

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	SPECIAL
4 digits	4 digits	4 digits	1 digit	1 digit	2 digits	2 digits
RCWL	0402 0603 0805 1206 1210 1218 2010 2512	R = decimal L = milliohm (use L below 0.1 ohm) Examples: R180 = .18 ohm R301 = .301 ohm 20L0 = .020 ohm  Check data sheet for available value range  Reference Data = Standard Electronic Decade Value Tables	F = $\pm 1.0\%$ J = $\pm 5.0\%$	N = 200 PPM R = 250 PPM M = 300 PPM Q = 400 PPM T = 600 PPM U = 1000 PPM	<b>STD LEADFREE CODES</b> EA = 7" Reel (0402 thru 2512) <b>STD TIN / LEAD CODES</b> TA = 7" Reel (0402 thru 2512) <b>NON-STD LEADFREE CODES</b> EB = 11.25" Reel (0402 thru 1206) EC = 13" Reel (0402 thru 1206) ED = 7" Reel, 4mm pitch (2512 only) EI = Plastic tape (1206 only) <b>NON-STD TIN / LEAD CODES</b> TB = 11.25" Reel (0402 thru 1206) TC = 13" Reel (0402 thru 1206) TD = 7" Reel, 4mm pitch (2512 only)	Dash #'s 01 thru 99 as applicable



# VISHAY DALE FILM RESISTORS

## RCWP

**SAP Part Number**  
 RCWP510010K0FKS6  
 RCWP05751M00FKEA  
 RCWP12060000ZSTP99

**SAP Description**  
 RCWP-5100 10K 1% K S82  
 RCWP-0575 1M 1% K EA e3  
 RCWP-1206-99 R01

MODEL 4 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 2 digits	SPECIAL Up to 2 digits
<b>RCWP</b>	<b>0201</b> <b>0302</b> <b>0402</b> <b>0502</b> <b>0540</b> <b>0550</b> <b>0575</b> <b>0603</b> <b>1100</b> <b>1206</b> <b>1210</b> <b>2010</b> <b>2512</b> <b>5100</b> <b>5150</b> <b>7225</b>	R = ohms K = kilohms M = Megohms  Check data sheet for available value range	<b>C</b> = ±0.25% <b>D</b> = ±0.5% <b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5% <b>K</b> = ±10% <b>M</b> = ±20% <b>Z</b> = 0 ohm jumper	<b>E</b> = ±25ppm/°C <b>H</b> = ±50ppm/°C <b>K</b> = ±100ppm/°C <b>L</b> = ±150ppm/°C <b>N</b> = ±200ppm/°C <b>M</b> = ±300ppm/°C <b>P</b> = ±500ppm/°C <b>S</b> = Special, 0 ohm jumper	<b>STANDARD LEADFREE CODES</b> <b>EA</b> = Reel pack, 7" reel (std taping, 4,000 pcs/reel except 2512 = 2,000 pcs/reel) <b>EB</b> = Reel pack, 7" reel (std taping except 1,000pcs/reel) <b>EC</b> = Reel pack, 7" reel (std taping except 500pcs/reel) <b>ED</b> = Reel pack, 7" reel (std taping except 300 pcs/reel) <b>ET</b> = Tray pack (all sizes except 0201) <b>STANDARD TIN/LEAD CODES</b> <b>TP</b> = Reel pack, Embossed carrier tape, 7" reel (R01, 4,000 pcs/reel except 2512 = 2,000 pcs/reel, std taping for all sizes except 0201) <b>S3</b> = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel, all sizes except 0201) <b>S2</b> = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel, all sizes except 0201) <b>S6</b> = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel, all sizes except 0201) <b>WB</b> = Tray pack (T03, all sizes except 0201) <b>UA</b> = Reel pack, Punched paper tape, 7" reel (4,000 pcs/reel except 2512 = 2,000 pcs/reel, std for 0201 size only) <b>UB</b> = Reel pack, Punched paper tape, 7" reel (std taping except 300 pcs/reel, std for 0201 size only) <b>UC</b> = Reel pack, Punched paper tape, 7" reel (std taping except 500 pcs/reel, std for 0201 size only) <b>UD</b> = Reel pack, Punched paper tape, 7" reel (std taping except 1,000 pcs/reel, std for 0201 size only) <b>U5</b> = Reel pack, Embossed carrier Tape, 7" reel, SLDC (std taping except 500 pcs/reel). <b>NON-STANDARD TIN/LEAD CODES</b> <b>TN</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) <b>SV</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) <b>SU</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) <b>ST</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) <b>WA</b> = Tray pack, w/ESD (M18) <b>BC</b> (P19), <b>BB</b> (P23) bulk pack available <b>TN (R78), TU (R87), TT (RT4), UL (RSL), ST (S76), SU (S77), SV (S78), SW (S79), SX (S80), S4 (S85), S5 (S86), S1 (S87), UE</b> reel pack available <b>T1 (T09), T2 (T15), T3 (T16), T4 (T17), WL (TSL)</b> tray pack available <b>SL (S51)</b> special pack available	Dash #'s 01 thru 99 as applicable  <b>Blank</b> = Solder pre-tinned (standard)  <b>GENERAL            USAGE DASH            NUMBERS</b> <b>30</b> = Part marking (0603 and larger case sizes; 4 digits for ≤ 1 %, 3 digits for ≥ 2 %) <b>69</b> = Moisture resistant <b>99</b> = 0 ohm jumper



# VISHAY DALE FILM RESISTORS

## RCWPM-99 (DSCC Drawing Military Jumper)

**SAP Part Number**  
**RCWPM1100TP99**  
**RCWPM0402TN99**

**SAP Description**  
**RCWPM-1100-99 87011-B R01**  
**RCWPM-0402-99 03014-B R78**

MODEL 5 digits	SIZE 4 digits	PACKAGING 2 digits	SPECIAL 2 digits
<b>RCWPM</b>	<b>0201</b> (DSCC P/N 03011-B) <b>0302</b> (DSCC P/N 03012-B) <b>0402</b> (DSCC P/N 03014-B) <b>0502</b> (DSCC P/N 88032-B) <b>0550</b> (DSCC P/N 03002-B) <b>0575</b> (DSCC P/N 90048-B) <b>0603</b> (DSCC P/N 03013-B) <b>1100</b> (DSCC P/N 87011-B) <b>1206</b> (DSCC P/N 94011-B) <b>2010</b> (DSCC P/N 03015-B) <b>2512</b> (DSCC P/N 03016-B) <b>5100</b> (DSCC P/N 90049-B) <b>5150</b> (DSCC P/N 90092-B) <b>7225</b> (DSCC P/N 90047-B)	<b>STANDARD TIN/LEAD CODES</b> <b>TP</b> = Reel pack, Embossed carrier tape, 7" reel (R01) <b>S3</b> = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) <b>S2</b> = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) <b>S6</b> = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) <b>WB</b> = Tray pack (T03) <b>STANDARD TIN/LEAD SLDC CODES</b> <b>UL</b> = Reel pack, Embossed carrier tape, 7" reel, std taping, SLDC <b>WL</b> = Tray pack, SLDC <b>NON-STANDARD TIN/LEAD CODES</b> <b>TN</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) <b>SV</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) <b>SU</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) <b>ST</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) <b>WA</b> = Tray pack, w/ESD (M18) <b>BC</b> (P19), <b>BB</b> (P23) bulk pack available <b>TU</b> (R87), <b>TT</b> (RT4), <b>SW</b> (S79), <b>SX</b> (S80), <b>S4</b> (S85), <b>S5</b> (S86), <b>S1</b> (S87), <b>UA, UB, UC, UD, UE</b> reel pack available <b>T1</b> (T09), <b>T2</b> (T15), <b>T3</b> (T16), <b>T4</b> (T17) tray pack available <b>SL</b> (S51) special pack available	<b>99</b> = 0 ohm jumper



# VISHAY DALE FILM RESISTORS

## RCWPM-99 (Military M32159 Jumper Thick Film)

**SAP Part Number**

M32159B05MTP  
M32159B07MWL  
M32159B09CWB  
M32159B12MS696  
M32159B08CS396

**SAP Description**

RCWPM-7225-99 M32159B05M R01  
RCWPM-1206-99 M32159B07M TSL  
RCWP-2512-99 M32159B09C T03  
RCWPM-0603-96 M32159B12M S82  
RCWP-2010-96 M32159B08C S84

MILITARY STYLE 6 digits	TERMINATIO N 1 digit	MIL. SPEC. SHEET 2 digits	FAILURE RATE  1 digit	PACKAGING  2 digits	SUFFIX  Up to 3 digits
<b>M32159</b>	<b>B</b> = Pre-tinned Nickel Barrier, wraparound	<b>01</b> = 0502 <b>02</b> = 0550 <b>03</b> = 5100 <b>04</b> = 5150 <b>05</b> = 7225 <b>06</b> = 0575 <b>07</b> = 1206 <b>08</b> = 2010 <b>09</b> = 2512 <b>10</b> = 1100 <b>11</b> = 0402 <b>12</b> = 0603 <b>13</b> = 0302	<b>C</b> = Non-ER <b>M</b> = Military Grade, High Reliability	<b>STANDARD TIN/LEAD CODES</b> <b>TP</b> = Reel pack, Embossed carrier tape, 7" reel (R01) <b>S3</b> = Reel pack, Embossed carrier tape, 7" reel (S84, std taping except 1,000 pcs/reel) <b>S2</b> = Reel pack, Embossed carrier tape, 7" reel (S83, std taping except 500 pcs/reel) <b>S6</b> = Reel pack, Embossed carrier tape, 7" reel (S82, std taping except 300 pcs/reel) <b>WB</b> = Tray pack (T03) <b>STANDARD TIN/LEAD SLDC CODES</b> <b>UL</b> = Reel pack, Embossed carrier tape, 7" reel, std taping, SLDC <b>WL</b> = Tray pack, SLDC <b>NON-STANDARD TIN/LEAD CODES</b> <b>TN</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (R78) <b>SV</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S78, std taping except 1,000 pcs/reel) <b>SU</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S77, std taping except 500 pcs/reel) <b>ST</b> = Reel pack, Embossed carrier tape, 7" reel, w/ESD (S76, std taping except 300 pcs/reel) <b>WA</b> = Tray pack, w/ESD (M18) <b>BC</b> (P19), <b>BB</b> (P23) bulk pack available <b>TU</b> (R87), <b>TT</b> (RT4), <b>SW</b> (S79), <b>SX</b> (S80), <b>S4</b> (S85), <b>S5</b> (S86), <b>S1</b> (S87), <b>UA</b> , <b>UB</b> , <b>UC</b> , <b>UD</b> , <b>UE</b> reel pack available <b>T1</b> (T09), <b>T2</b> (T15), <b>T3</b> (T16), <b>T4</b> (T17) tray pack available <b>SL</b> (S51) special pack available	<b>Blank</b> = Standard (-99) <b>96</b> = Part Marked (-96)



# VISHAY DALE FILM RESISTORS

## RDX

**SAP Part Number**  
 RDX4B199MGNJ03AA  
 RDX3A2M50GNE03AD  
 RDX5Z1M50FKJ03ZZ2

**SAP Description**  
 RDX-4B 199M 2% T-00 J03 10,000:1  
 RDX-3A 2.5M 2% T-00 E03 2,000:1 e3  
 RDX-5-2 1.5M 1% T-1 J03

MODEL 3 digits	SIZE 1 digit	CONFIGURATION 1 digit	VALUE (R <sub>1</sub> ) 4 digits	TOL. 1 digit	T.C. 1 digit	PACKAGING 3 digits	RATIO 2 digits	SPECIAL Up to 2 digits
RDX	2 3 4 5 6 7	A = Axial leads B = Radial tabs C = Radial ends, axial tap Z = None	K = kilohms M = Megohms G = Gigohms  Check data sheet for available value range	F = ±1% G = ±2% J = ±5% K = ±10%	K = ±100ppm/°C (T-1) N = ±200ppm/°C (T-00)  "old" M = 200ppm = N in SAP	<b>STANDARD LEAD FREE CODES*</b> E03 = Skin pack <b>STANDARD TIN/LEAD CODES</b> J03 = Skin pack <b>NON-STANDARD TIN/LEAD CODES</b> S51 = Custom pack, per TPI  * Leadfree version not currently released	AA to ZZ as needed  AA = 10,000:1 AB = 5,000:1 AC = 1,000:1 AD = 2,000:1 AE = 150:1 ZZ = null, see TPI	Dash #'s 1 thru 99 as applicable  Blank = Standard



# VISHAY DALE FILM RESISTORS

## RJU

**SAP Part Number**  
 RJU2753M02GKF07  
 RJU0402M50KNE07  
 RJU0953M02GKF071

**SAP Description**  
 RJU-275 3.02M 2% T-1 F07  
 RJU-40 2.5M 10% T-00 E07 e3  
 RJU-95-1 3.02M 2% T-1 F07

MODEL 3 digits	SIZE 3 digits	VALUE 4 digits	TOLERANCE 1 digit	T.C. 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RJU	<b>040</b> = 40 <b>050</b> = 50 <b>070</b> = 70 <b>095</b> = 95 <b>140</b> <b>150</b> <b>275</b> <b>400</b>	<b>K</b> = kilohms <b>M</b> = Megohms <b>G</b> = Gigohms  Check data sheet for available value range	<b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5% <b>K</b> = ±10%	<b>K</b> = ±100ppm/°C (T-1) <b>N</b> = ±200ppm/°C (T-00)	<b>STANDARD LEAD FREE            CODES</b> <b>E07</b> = Foam pack <b>STANDARD TIN/LEAD            CODES</b> <b>F07</b> = Foam pack <b>NON-STANDARD TIN/LEAD            CODES</b> <b>J03</b> = Skin pack <b>L05</b> = Lacer pack <b>S51</b> = Custom pack, per TPI	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS

## RNX

**SAP Part Number**

RNX05010M0FHLB  
 RNX2001G00KNEL  
 RNX12561M3FKLBP

**SAP Description**

RNX-1/2 10M 1% T-2 L05  
 RNX-2 1G 10% T-00 EL e3  
 RNX-1-1/4P 61.3M 1% T-1 L05

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	OPTIONAL CONSTRUCTION	SPECIAL
3 digits	3 digits	4 digits	1 digit	1 digit	2 digits	0 or 1 digit	Up to 3 digits
<b>RNX</b>	<b>025</b> = 1/4 <b>038</b> = 3/8 <b>050</b> = 1/2 <b>075</b> = 3/4 <b>100</b> = 1 <b>125</b> = 1-1/4 <b>150</b> = 1-1/2 <b>200</b> = 2	<b>R</b> = ohms <b>K</b> = kilohms <b>M</b> = Megohms <b>G</b> = Gigohms  Check data sheet for available value range	<b>D</b> = ±0.5% <b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5% <b>K</b> = ±10%	<b>H</b> = ±50ppm/°C (T-2) <b>K</b> = ±100ppm/°C (T-1) <b>N</b> = ±200ppm/°C (T-00)  "old" M = 200ppm = N in SAP	<b>STANDARD LEAD FREE CODES</b> <b>EL</b> = Lacer pack <b>EE</b> = Reel pack, 0.200" or 0.400" pitch, 2-1/2" tape spacing, no leadtrim <b>EB</b> = Reel pack (std taping except 1,000pcs/reel)  <b>STANDARD TIN/LEAD CODES</b> <b>LB</b> = Lacer pack (L05) <b>RC</b> = Reel pack, 0.200" pitch, 2-1/2" tape spacing, no leadtrim (R19) <b>RF</b> = Reel pack, 0.400" pitch, 2-1/2" tape spacing, no leadtrim (R48) <b>R6</b> = Reel pack (std taping except 1,000pcs/reel)  <b>NON-STANDARD TIN/LEAD CODES</b> <b>BF</b> = Bulk pack (B14) <b>SL</b> = Custom pack, per TPI (S51) <b>A5, RA</b> (R05), <b>RB</b> (R08), <b>RG</b> (R20), <b>RE</b> (R36), <b>WG</b> (RE4), <b>WF</b> (RE5), <b>R7</b> (RE7), <b>R8</b> (RE8) <b>CK</b> (RH4) reel pack available	<b>Blank</b> = Standard <b>N</b> = Non-inductive (200ppm TC only) <b>P</b> = 0.032" DIA leads	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard





# VISHAY DALE FILM RESISTORS

## ROX

**SAP Part Number**  
 ROX300100MGNF5  
 ROX15033M0FHFL  
 ROX0753M70JNLBP12  
 ROX200200KJNF5NT99

**SAP Description**  
 ROX-3 100M 2% T-00 F05  
 ROX-1-1/2 33M 1% T-2 EL e3  
 ROX-3/4P-12 3.7M 5% T-00 L05  
 ROX-2NT-99 200K 5% T-00 F05

MODEL	SIZE	VALUE	TOLERANCE	T.C.	PACKAGING	OPTIONAL CONSTRUCTION	SPECIAL
3 digits	3 digits	4 digits	1 digit	1 digit	2 digits	Up to 2 digits	Up to 3 digits
<b>ROX</b>	<b>050</b> = 1/2 <b>075</b> = 3/4 <b>100</b> = 1 <b>150</b> = 1-1/2 <b>200</b> = 2 <b>300</b> = 3 <b>400</b> = 4 <b>500</b> = 5 <b>600</b> = 6	<b>R</b> = ohms <b>K</b> = kilohms <b>M</b> = Megohms <b>G</b> = Gigohms  Check data sheet for available value range	<b>D</b> = ±0.5% <b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5% <b>K</b> = ±10%	<b>H</b> = ±50ppm/°C (T-2) <b>K</b> = ±100ppm/°C (T-1) <b>N</b> = ±200ppm/°C (T-00)  "old" M = 200ppm = N in SAP	<b>STANDARD LEAD FREE CODES</b> <b>EL</b> = Lacer pack <b>EE</b> = Reel pack, 0.400" pitch, 2-1/2" tape spacing, no leadtrim <b>EM</b> = Foam pack, 5/ea rolled diagonally in Microfoam <b>STANDARD TIN/LEAD CODES</b> <b>LB</b> = Lacer pack (L05) <b>RF</b> = Reel pack, 0.400" pitch, 2-1/2" tape spacing, no leadtrim (R48) <b>F5</b> = Foam pack, 5/ea rolled diagonally in Microfoam (F05) <b>NON-STANDARD TIN/LEAD CODES</b> <b>SL</b> = Custom pack, per TPI (S51) <b>RD</b> (R35), <b>WF</b> (RE5), <b>R6</b> (RE6) reel pack available	<b>Blank</b> = Standard <b>N</b> = Non-inductive (200ppm TC only) <b>P</b> = 0.040" DIA leads <b>S</b> = Solid body, axial <b>T</b> = Threaded terminals <b>Y</b> = One end axial, one end threaded terminal  NOTE: Maximum of 4 digits between Optional Construction and Special columns combined	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS

## RZY

**SAP Part Number**

RZY1F02

RZY2S511

**SAP Description**

RZY-1 F02

RZY-2-1 S51

MODEL 3 digits	TYPE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
RZY	1 2	<b>STANDARD TIN/LEAD CODES</b> S51 = Custom pack, per TPI <b>NON-STANDARD TIN/LEAD CODES</b> F02 = Foam pack F05 = Foam pack, 5/ea rolled diagonally in Microfoam	1 thru 999 as applicable  <b>Blank = Standard</b>



# VISHAY DALE FILM RESISTORS SPF

**SAP Part Number**

SPF-13  
SPF-172-2

**SAP Description**

SPF-13 S51  
SPF-175-2 S51

**Standard packaging code S51 for all part numbers**

MODEL 3 digits	TYPE 2 to 4 digits	SPECIAL Up to 4 digits
<b>SPF</b>	-1 thru -999  -2 -5 -34 -76 -101 -186	-xxx (only if needed, where xxx = 1 thru 999)



# VISHAY DALE FILM RESISTORS

## SPTF

SAP Part Number

SPTF110  
SPTF090S2

SAP Description

SPTF-110 S51  
SPTF-90-2 S51

Standard packaging code S51 for all part numbers

MODEL 4 digits	TYPE 3 digits	SPECIAL Up to 4 digits
SPTF	001 thru 999  074 = 74 090 = 90 110 116 121	Sxxx (only if needed, where xxx = 1 thru 999)



# VISHAY DALE FILM RESISTORS SPW

SAP Part Number  
SPW22750R00JSL

SAP Description  
SPW-227 50 5% S51

MODEL 3 digits	SIZE 3 digits	VALUE 5 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
<b>SPW</b>	001 thru 999  (Standard Catalog sizes) <b>236</b> <b>227</b> <b>210</b> <b>214</b> <b>212</b>	<b>R</b> = ohms  Check data sheet for available value range	<b>G</b> = $\pm 2\%$ <b>J</b> = $\pm 5\%$ <b>K</b> = $\pm 10\%$	<b>STANDARD CODES</b> <b>SL</b> = Custom pack, per TPI (S51)	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS SPWC

SAP Part Number  
SPWC010450R1JSL

SAP Description  
SPWC-104 50.1 5% S51

MODEL 4 digits	SIZE 4 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 2 digits	SPECIAL Up to 3 digits
SPWC	0104 0105 0204 0205	R = ohms  Check data sheet for available value range	J = ±5%	STANDARD CODES SL = Custom pack, per TPI (S51)	Dash #'s 1 thru 999 as applicable  Blank = Standard



# VISHAY DALE FILM RESISTORS T-SERIES

**SAP Part Number**  
**TAOW43M0LB21**  
**TAKW2M00ME21**  
**TAFW30M0KB217**

**SAP Description**  
**TAOW 43M 15% B21**  
**TAKW 2M 20% E21 e3**  
**TAFW-7 30M 10% B21**

MODEL 4 digits	VALUE 4 digits	TOLERANCE 1 digit	PACKAGING 3 digits	SPECIAL Up to 3 digits
<b>TAEW</b> <b>TAFW</b> <b>TAKW</b> <b>TAOW</b> <b>TAQW</b> <b>TARW</b>	<b>M</b> = Megohms <b>G</b> = Gigohms  Check data sheet for available value range	<b>J</b> = $\pm 5\%$ <b>K</b> = $\pm 10\%$ <b>L</b> = $\pm 15\%$ <b>M</b> = $\pm 20\%$	<b>STANDARD LEAD FREE CODES</b> <b>E21</b> = Bulk pack, big box <b>STANDARD TIN/LEAD CODES</b> <b>B21</b> = Bulk pack, big box <b>NON-STANDARD LEAD FREE CODES</b> <b>E22</b> = Bulk pack, small box <b>NON-STANDARD TIN/LEAD CODES</b> <b>B14</b> = Bulk pack <b>B22</b> = Bulk pack, small box <b>S51</b> = Custom pack, per TPI	Dash #'s 1 thru 999 as applicable  <b>Blank</b> = Standard



# VISHAY DALE FILM RESISTORS MISCELLANEOUS (cont 1 of 3)

SAP Part Number  
81018706B29

SAP Description  
810187-06 B29 (Part number for 810187-06 reel plug, packaged B29)

<b>PART NUMBER</b> 6 digits	<b>DASH TYPE</b> 2 digits	<b>PACKAGING</b> 3 digits
2xxxxx 8xxxxx	00 thru 99 as applicable	B29, P03, S27, S31, T03, etc.





# VISHAY DALE FILM RESISTORS

## LOT CHARGES (cont 2 of 3)

SAP Part Number  
LOTCHG-R-CHIPMIL  
LOTCHG-DALEFILMMIL

SAP Description  
LOTCHG-R-CHIPMIL S31  
LOTCHG-DALEFILMMIL S31

Standard packaging code S31 for all part numbers

CHARGE 7 digits	RESISTOR STYLE Up to 11 digits
LOTCHG-	DALEFILMMIL = Dale Leaded-Film Military (Material Group FF1) DALEFILMCOM = Dale Leaded Film Commercial (Material Group FF2) R-CHIPMIL = Dale R-Chips (SMD) Military (Material Group FF3)



# VISHAY DALE FILM RESISTORS FAST TRACK PROGRAM (cont 3 of 3)

SAP Part Number  
FSTTRK10DALEFFCOM  
FSTTRK20R-CHIPMIL

SAP Description  
FSTTRK10DALEFFCOM S31  
FSTTRK20R-CHIPMIL S31

Standard packaging code S31 for all part numbers

CHARGE 6 digits	LEAD TIME 2 digits	RESISTOR STYLE 9 digits
FSTTRK	05 = 5 working days 10 = 10 working days 15 = 15 working days 20 = 20 working days	DALEFFMIL = Dale Leaded-Film Military (Material Group FF1) DALEFFCOM = Dale Film Leaded Commercial (Material Group FF2) R-CHIPMIL = Dale R-Chips (SMD) Military (Material Group FF3)