



## vPolyTan™ Polymer Surface-Mount Chip Capacitors Solid State Drive (SSD) Sample Kit



### FEATURES

- Low ESR
- 100 % surge current tested
- Accelerated voltage conditioning
- High ripple current capability
- Stable capacitance in operating temperature range
- Better capacitance stability vs frequency
- No wear out effect
- Molded case 7343 EIA size
- Terminations: undertab
- Operating temperature: -55 °C to +105 °C
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
**HALOGEN**  
**FREE**  
**GREEN**  
(5-2008)

### LINKS TO ADDITIONAL RESOURCES



### APPLICATIONS

- Decoupling, smoothing, filtering
- Bulk energy storage in solid state drives (SSD)
- Infrastructure equipment
- Storage and networking
- Computer motherboards
- Smartphones and tablets

| SPECIFICATIONS              |                                  |
|-----------------------------|----------------------------------|
| Part number                 | KIT-POLYTAN-SSD                  |
| Capacitor type              | Conductive polymer               |
| Capacitor tolerance         | ± 20 %                           |
| Operating temperature range | -55 °C to +105 °C                |
| Termination finish          | Ni / Pd / Au (T55), Sn (T52)     |
| Moisture sensitivity level  | 3                                |
| Number of capacitors        | See Capacitance Value List table |

| T52 DIMENSIONS in inches [millimeters] |          |                |                              |                              |                              |                 |                              |          |          |
|--|----------|----------------|------------------------------|------------------------------|------------------------------|-----------------|------------------------------|----------|----------|
| CASE CODE B2, E5                       |          |                |                              |                              |                              |                 |                              |          |          |
|  |          |                |                              |                              |                              |                 |                              |          |          |
| CASE CODE                              | EIA SIZE | H (MAX.)       | L                            | W                            | P1                           | P2 (REF.)       | C                            | B (REF.) | D (REF.) |
| B2                                     | 3528-12  | 0.047<br>[1.2] | 0.138 ± 0.008<br>[3.5 ± 0.2] | 0.110 ± 0.008<br>[2.8 ± 0.2] | 0.031 ± 0.008<br>[0.8 ± 0.2] | 0.077<br>[1.95] | 0.079 ± 0.004<br>[2.0 ± 0.1] | -        | -        |
| E5                                     | 7343-15  | 0.059<br>[1.5] | 0.287 ± 0.012<br>[7.3 ± 0.3] | 0.169 ± 0.012<br>[4.3 ± 0.3] | 0.051 ± 0.008<br>[1.3 ± 0.2] | 0.191<br>[4.85] | 0.094 ± 0.008<br>[2.4 ± 0.2] | -        | -        |



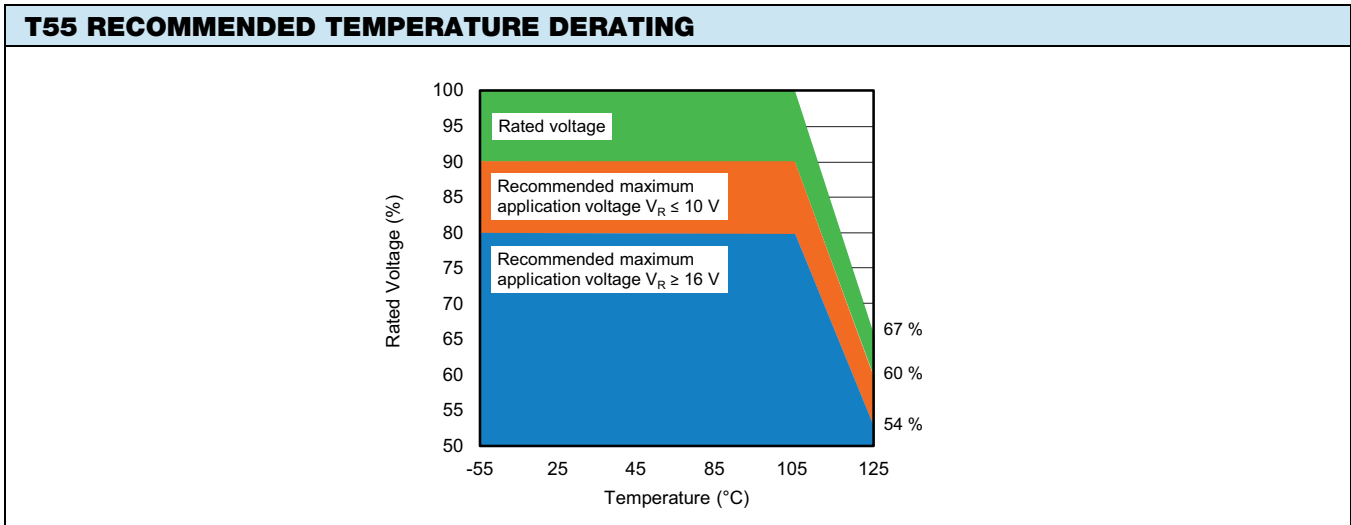
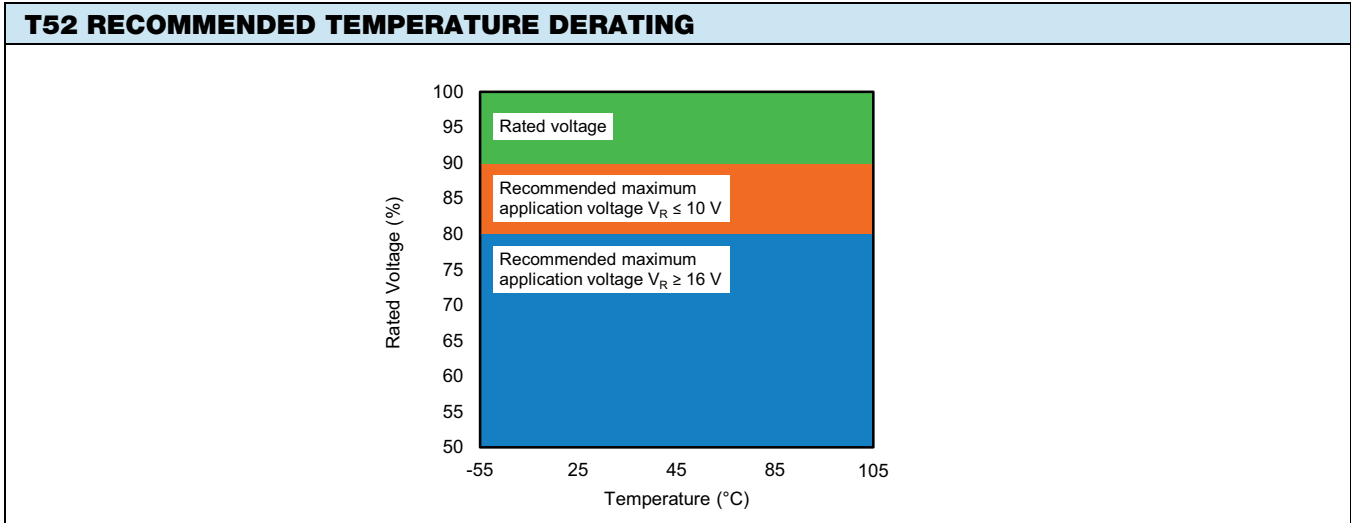
| <b>T52 DIMENSIONS</b> in inches [millimeters] |          |                |                              |                              |                              |                |                              |                |                |
|---|----------|----------------|------------------------------|------------------------------|------------------------------|----------------|------------------------------|----------------|----------------|
| CASE CODE M1, M9                              |          |                |                              |                              |                              |                |                              |                |                |
|   |          |                |                              |                              |                              |                |                              |                |                |
| CASE CODE                                     | EIA SIZE | H (MAX.)       | L                            | W                            | P1                           | P2 (REF.)      | C                            | B (REF.)       | D (REF.)       |
| M1  | 7360-20  | 0.079<br>[2.0] | 0.287 ± 0.012<br>[7.3 ± 0.3] | 0.236 ± 0.012<br>[6.0 ± 0.3] | 0.075 ± 0.008<br>[1.9 ± 0.2] | 0.138<br>[3.5] | 0.177 ± 0.008<br>[4.5 ± 0.2] | 0.079<br>[2.0] | 0.020<br>[0.5] |

| <b>T55 DIMENSIONS</b> in inches [millimeters] |          |                              |                              |                              |                              |                              |
|---|----------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
|   |          |                              |                              |                              |                              |                              |
| CASE CODE                                     | EIA SIZE | L                            | W                            | H                            | I                            | a                            |
| Z   | 7343-19  | 0.287 ± 0.008<br>[7.3 ± 0.2] | 0.169 ± 0.012<br>[4.3 ± 0.3] | 0.071 ± 0.004<br>[1.8 ± 0.1] | 0.051 ± 0.012<br>[1.3 ± 0.3] | 0.094 ± 0.008<br>[2.4 ± 0.2] |
| D   | 7343-31  | 0.287 ± 0.008<br>[7.3 ± 0.2] | 0.169 ± 0.012<br>[4.3 ± 0.3] | 0.110 ± 0.012<br>[2.8 ± 0.3] | 0.051 ± 0.012<br>[1.3 ± 0.3] | 0.094 ± 0.008<br>[2.4 ± 0.2] |

| <b>CAPACITANCE VALUE LIST</b> |                  |             |                                  |                                 |                      |
|-------------------------------|------------------|-------------|----------------------------------|---------------------------------|----------------------|
| PART NUMBER                   | CAPACITANCE (μF) | VOLTAGE (V) | CASE CODE (SEE DIMENSIONS TABLE) | MAX. ESR AT +25 °C 100 kHz (mΩ) | NUMBER OF CAPACITORS |
| T52B2476M016C0200             | 47               | 16          | B2                               | 200                             | 10                   |
| T52E5157M016C0050             | 150              | 16          | E5                               | 50                              | 10                   |
| T52M1227M016C0055             | 220              | 16          | M1                               | 55                              | 10                   |
| T52M1337M016C0040             | 330              | 16          | M1                               | 40                              | 10                   |
| T52M1227M025C0070             | 220              | 25          | M1                               | 70                              | 10                   |
| T52M1107M035C0055             | 100              | 35          | M1                               | 55                              | 10                   |
| T52E5476M035C0055             | 47               | 35          | E5                               | 55                              | 10                   |
| T55Z476M016C0045              | 47               | 16          | Z                                | 45                              | 10                   |
| T55Z107M016C0050              | 100              | 16          | Z                                | 50                              | 10                   |
| T55D157M016C0015              | 150              | 16          | D                                | 15                              | 10                   |
| T55Z476M020C0070              | 47               | 20          | Z                                | 70                              | 10                   |
| T55Z336M025C0050              | 33               | 25          | Z                                | 50                              | 10                   |



| RECOMMENDED VOLTAGE DERATING GUIDELINES |                   |
|---|-------------------|
| CAPACITOR VOLTAGE RATING                | OPERATING VOLTAGE |
| 16                                      | 12.8              |
| 20                                      | 16                |
| 25                                      | 20                |
| 35                                      | 28                |



For PERFORMANCE CHARACTERISTICS tables, please refer to T52 datasheet ([www.vishay.com/ppg?40216](http://www.vishay.com/ppg?40216)) and T55 datasheet ([www.vishay.com/ppg?40174](http://www.vishay.com/ppg?40174)).