

Solid Tantalum Surface Mount Chip Capacitors TANTAMOUNT[®], Molded Case, Hi-Rel COTS



PERFORMANCE/ELECTRICAL CHARACTERISTICS

www.vishay.com/doc?40088

Operating Temperature: - 55 °C to + 125 °C
(above 85 °C, voltage derating is required)

Capacitance Range: 0.1 µF to 470 µF

Capacitance Tolerance: ± 10 %, ± 20 %

Voltage Rating: 4 V_{DC} to 63 V_{DC}

FEATURES

- Standard and low ESR options
- Weibull grading and surge current test options
- Terminations: 100 % matte tin and tin/lead
- Standard EIA 535BAAC case sizes (A through E)
- Moisture sensitivity level 1
- Compliant terminations
- High reliability
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



RoHS*
COMPLIANT

Note

* Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.

APPLICATIONS

- Industrial
- Medical
- Military/aerospace
- Telecom

ORDERING INFORMATION

| T83 | D | 107 | K | 010 | E | A | A | S |
|------|-----------------------------------|--|--|--|---|---|--|--------------------|
| TYPE | CASE CODE | CAPACITANCE | CAPACITANCE TOLERANCE | DC VOLTAGE RATING AT + 85 °C | TERMINATION AND PACKAGING | RELIABILITY LEVEL | SURGE CURRENT | ESR |
| | See Ratings and Case Codes table. | This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow. | K = ± 10 % M = ± 20 % J = ± 5 % (special order) | This is expressed in volts. To complete the three-digit block, zeros precede the voltage rating. A decimal point is indicated by an "R" (6R3 = 6.3 V). | See table Termination and Packaging Codes | A = 1.0 % B = 0.1 % C = 0.01 % S = Hi-Rel standard Z = Non-ER | A = 10 cycles at + 25 °C B = 10 cycles at - 55 °C/+ 85 °C C = 10 cycles at - 55 °C/+ 85 °C (before Weibull grading) Z = None S = 3 cycles at + 25 °C | S = Std L = Low |

TERMINATION AND PACKAGING CODES

| CODE | TERMINATION | PACKAGING |
|------|-------------------------|---------------------------------|
| C | Matte tin | 7" (178 mm) reels |
| H | Matte tin | 7" (178 mm) reels, ½ reel |
| U | Matte tin | 7" (178 mm) reels, partial reel |
| E | Solder plated, tin/lead | 7" (178 mm) reels |
| L | Solder plated, tin/lead | 7" (178 mm) reels, ½ reel |
| R | Solder plated, tin/lead | 7" (178 mm) reels, partial reel |
| K | Solder fused, tin/lead | 7" (178 mm) reels |
| M | Solder fused, tin/lead | 7" (178 mm) reels, ½ reel |
| N | Solder fused, tin/lead | 7" (178 mm) reels, partial reel |

DIMENSIONS in inches (millimeters)


| CASE CODE | EIA SIZE | L | W | H | P | T _W | T _H (MIN.) |
|-----------|----------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|-----------------------|
| A | 3216-18 | 0.126 ± 0.008 [3.2 ± 0.20] | 0.063 ± 0.008 [1.6 ± 0.20] | 0.063 ± 0.008 [1.6 ± 0.20] | 0.031 ± 0.012 [0.80 ± 0.30] | 0.047 ± 0.004 [1.2 ± 0.10] | 0.028 [0.70] |
| B | 3528-21 | 0.138 ± 0.008 [3.5 ± 0.20] | 0.110 ± 0.008 [2.8 ± 0.20] | 0.075 ± 0.008 [1.9 ± 0.20] | 0.031 ± 0.012 [0.80 ± 0.30] | 0.087 ± 0.004 [2.2 ± 0.10] | 0.028 [0.70] |
| C | 6032-28 | 0.236 ± 0.012 [6.0 ± 0.30] | 0.126 ± 0.012 [3.2 ± 0.30] | 0.098 ± 0.012 [2.5 ± 0.30] | 0.051 ± 0.012 [1.3 ± 0.30] | 0.087 ± 0.004 [2.2 ± 0.10] | 0.039 [1.0] |
| D | 7343-31 | 0.287 ± 0.012 [7.3 ± 0.30] | 0.169 ± 0.012 [4.3 ± 0.30] | 0.110 ± 0.012 [2.8 ± 0.30] | 0.051 ± 0.012 [1.3 ± 0.30] | 0.094 ± 0.004 [2.4 ± 0.10] | 0.039 [1.0] |
| E | 7343-43 | 0.287 ± 0.012 [7.3 ± 0.30] | 0.169 ± 0.012 [4.3 ± 0.30] | 0.157 ± 0.012 [4.0 ± 0.30] | 0.051 ± 0.012 [1.3 ± 0.30] | 0.094 ± 0.004 [2.4 ± 0.10] | 0.039 [1.0] |

RATINGS AND CASE CODES

| μF | 4 V | 6.3 V | 10 V | 16 V | 20 V | 25 V | 35 V | 50 V | 63 V |
|------|-----|-------|-------|-------|-------|-------|------|------|------|
| 0.10 | | | | | | | A | A | |
| 0.15 | | | | | | | A | A/B | |
| 0.22 | | | | | | | A | B | |
| 0.33 | | | | | | A | A | B | |
| 0.47 | | | | | A | A | A/B | B/C | |
| 0.68 | | | | A | A | B | B | C | |
| 1.0 | | | A | A | A | A/B | A/B | B/C | |
| 1.5 | | A | A | A | B | B | B/C | C/D | |
| 2.2 | A | A | | B | A/B | A/B/C | B/C | C/D | |
| 3.3 | A | A | B | B | B | B/C | B/C | D | |
| 4.7 | A | A/B | A/B | A/B | A/B/C | B/C | C/D | D | D |
| 6.8 | B | B | B | C | C | C/D | C/D | E | |
| 10 | B | B | A/C | A/B/C | B/C | B/C/D | C/D | E | E |
| 15 | B | C | A/C | B | D | C/D | D | E | |
| 22 | | A/C | A | B/C/D | C/D | D | D/E | | |
| 33 | A/C | B/C | B/C/D | B/C/D | D | D/E | | | |
| 47 | B/C | B/C/D | B/C/D | C/D | D/E | D/E | | | |
| 68 | D | D | D | D | D/E | | | | |
| 100 | B/D | B/D | C/D | D/E | E | | | | |
| 150 | D | D/E | D | E | | | | | |
| 220 | | C/D/E | D/E | | | | | | |
| 330 | E | E | E | | | | | | |
| 470 | | | E | | | | | | |



| STANDARD RATINGS | | | | | | | | |
|---|-----------|---------------------------|--------------------------|-------------------------------|--|---|------------------------------|--|
| CAPACITANCE (μF) | CASE CODE | PART NUMBER | MAX. DCL AT + 25 °C (μA) | MAX. DF AT + 25 °C 120 Hz (%) | STD. (S) MAX. ESR AT + 25 °C 100 kHz (Ω) | LOW (L) MAX. ESR AT + 25 °C 100 kHz (Ω) | AVAILABLE RELIABILITY LEVELS | |
| 6 V_{DC} AT + 85 °C; 4 V_{DC} AT + 125 °C | | | | | | | | |
| 10 | B | T83B106(1)6R3(2)(6)(4)(5) | 0.60 | 6 | 2.900 | 1.000 | A, B, C, S, Z | |
| 15 | C | T83C156(1)6R3(2)(6)(4)(5) | 0.90 | 6 | 1.800 | 0.600 | A, B, C, S, Z | |
| 22 | A | T83A226(1)6R3(2)(3)(4)(5) | 1.3 | 6 | 2.900 | 2.000 | A, B, S, Z | |
| 22 | C | T83C226(1)6R3(2)(6)(4)(5) | 1.3 | 6 | 1.800 | 0.500 | A, B, C, S, Z | |
| 33 | B | T83B336(1)6R3(2)(3)(4)(5) | 2.0 | 6 | 1.900 | 0.600 | A, B, S, Z | |
| 33 | C | T83C336(1)6R3(2)(3)(4)(5) | 2.0 | 6 | 1.500 | 0.400 | A, B, S, Z | |
| 47 | B | T83B476(1)6R3(2)(3)(4)(5) | 2.8 | 6 | 1.900 | 0.550 | A, B, S, Z | |
| 47 | C | T83C476(1)6R3(2)(3)(4)(5) | 2.8 | 6 | 1.400 | 0.300 | A, B, S, Z | |
| 47 | D | T83D476(1)6R3(2)(6)(4)(5) | 2.8 | 6 | 0.800 | 0.200 | A, B, C, S, Z | |
| 68 | D | T83D686(1)6R3(2)(6)(4)(5) | 4.1 | 6 | 0.700 | 0.200 | A, B, C, S, Z | |
| 100 | B | T83B107(1)6R3(2)(3)(4)(5) | 6.0 | 15 | 1.700 | 0.500 | A, B, S, Z | |
| 100 | D | T83D107(1)6R3(2)(3)(4)(5) | 6.0 | 6 | 0.700 | 0.140 | A, B, S, Z | |
| 150 | D | T83D157(1)6R3(2)(3)(4)(5) | 9.0 | 8 | 0.600 | 0.125 | A, B, S, Z | |
| 150 | E | T83E157(1)6R3(2)(3)(4)(5) | 9.0 | 8 | 0.500 | 0.100 | A, B, S, Z | |
| 220 | C | T83C227(1)6R3(2)(3)(4)(5) | 13.2 | 14 | 0.700 | 0.300 | A, B, S, Z | |
| 220 | D | T83D227(1)6R3(2)(3)(4)(5) | 13.2 | 8 | 0.600 | 0.100 | A, B, S, Z | |
| 220 | E | T83E227(1)6R3(2)(3)(4)(5) | 13.2 | 8 | 0.500 | 0.100 | A, B, S, Z | |
| 330 | E | T83E337(1)6R3(2)(3)(4)(5) | 19.8 | 8 | 0.500 | 0.100 | A, B, S, Z | |
| 10 V_{DC} AT + 85 °C; 7 V_{DC} AT + 125 °C | | | | | | | | |
| 1.0 | A | T83A105(1)010(2)(6)(4)(5) | 0.50 | 4 | 9.300 | 6.000 | A, B, C, S, Z | |
| 1.5 | A | T83A155(1)010(2)(6)(4)(5) | 0.50 | 6 | 8.000 | 6.000 | A, B, C, S, Z | |
| 3.3 | B | T83B335(1)010(2)(6)(4)(5) | 0.50 | 6 | 3.500 | 2.500 | A, B, C, S, Z | |
| 4.7 | A | T83A475(1)010(2)(3)(4)(5) | 0.50 | 6 | 5.000 | 3.000 | A, B, S, Z | |
| 4.7 | B | T83B475(1)010(2)(6)(4)(5) | 0.50 | 6 | 3.400 | 1.500 | A, B, C, S, Z | |
| 6.8 | B | T83B685(1)010(2)(6)(4)(5) | 0.70 | 6 | 2.900 | 1.200 | A, B, C, S, Z | |
| 10 | A | T83A106(1)010(2)(3)(4)(5) | 1.0 | 6 | 3.400 | 1.800 | A, B, C, S, Z | |
| 10 | C | T83C106(1)010(2)(3)(4)(5) | 1.0 | 6 | 1.800 | 0.550 | A, B, S, Z | |
| 15 | A | T83A156(1)010(2)(3)(4)(5) | 1.5 | 6 | 2.900 | 2.000 | A, B, S, Z | |
| 15 | C | T83C156(1)010(2)(6)(4)(5) | 1.5 | 6 | 1.800 | 0.500 | A, B, C, S, Z | |
| 22 | A | T83A226(1)010(2)(3)(4)(5) | 2.2 | 8 | 2.500 | 1.500 | A, B, S, Z | |
| 33 | B | T83B336(1)010(2)(3)(4)(5) | 3.3 | 6 | 1.900 | 0.600 | A, B, S, Z | |
| 33 | C | T83C336(1)010(2)(3)(4)(5) | 3.3 | 6 | 1.400 | 0.350 | A, B, S, Z | |
| 33 | D | T83D336(1)010(2)(6)(4)(5) | 3.3 | 6 | 0.800 | 0.250 | A, B, S, Z | |
| 47 | B | T83B476(1)010(2)(3)(4)(5) | 4.7 | 6 | 1.800 | 0.600 | A, B, S, Z | |
| 47 | C | T83C476(1)010(2)(3)(4)(5) | 4.7 | 6 | 1.100 | 0.300 | A, B, S, Z | |
| 47 | D | T83D476(1)010(2)(6)(4)(5) | 4.7 | 6 | 0.700 | 0.200 | A, B, C, S, Z | |
| 68 | D | T83D686(1)010(2)(3)(4)(5) | 6.8 | 6 | 0.700 | 0.150 | A, B, S, Z | |
| 100 | C | T83C107(1)010(2)(6)(4)(5) | 10.0 | 8 | 0.900 | 0.200 | A, B, C, S, Z | |
| 100 | D | T83D107(1)010(2)(6)(4)(5) | 10.0 | 8 | 0.600 | 0.100 | A, B, C, S, Z | |
| 150 | D | T83D157(1)010(2)(3)(4)(5) | 15.0 | 8 | 0.600 | 0.100 | A, B, S, Z | |
| 220 | D | T83D227(1)010(2)(6)(4)(5) | 22.0 | 8 | 0.600 | 0.360 | A, B, C, S, Z | |
| 220 | E | T83E227(1)010(2)(3)(4)(5) | 22.0 | 8 | 0.500 | 0.100 | A, B, C, S, Z | |
| 330 | E | T83E337(1)010(2)(3)(4)(5) | 33.0 | 10 | 0.500 | 0.100 | A, B, S, Z | |
| 470 | E | T83E477(1)010(2)(3)(4)(5) | 47.0 | 15 | 0.500 | 0.100 | A, B, S, Z | |

Note

- Part number definitions:
 - Capacitance tolerance: K, M
 - Termination and packaging: C, E, K, H, L, M, U, R, N
 - Reliability level: A, B, S, Z
 - Surge current: A, B, C, Z, S
 - ESR: L, S
 - Reliability level: A, B, C, S, Z
 - Reliability level: A, S, Z



| STANDARD RATINGS | | | | | | | |
|--|-----------|---------------------------|--------------------------|-------------------------------|--|---|------------------------------|
| CAPACITANCE (μF) | CASE CODE | PART NUMBER | MAX. DCL AT + 25 °C (μA) | MAX. DF AT + 25 °C 120 Hz (%) | STD. (S) MAX. ESR AT + 25 °C 100 kHz (Ω) | LOW (L) MAX. ESR AT + 25 °C 100 kHz (Ω) | AVAILABLE RELIABILITY LEVELS |
| 16 V_{DC} AT + 85 °C; 10 V_{DC} AT + 125 °C | | | | | | | |
| 0.68 | A | T83A684(1)016(2)(3)(4)(5) | 0.50 | 4 | 11.000 | 8.000 | A, B, S, Z |
| 1.0 | A | T83A105(1)016(2)(3)(4)(5) | 0.50 | 4 | 9.300 | 6.000 | A, B, S, Z |
| 1.5 | A | T83A155(1)016(2)(3)(4)(5) | 0.50 | 6 | 6.700 | 6.000 | A, B, S, Z |
| 2.2 | B | T83B225(1)016(2)(3)(4)(5) | 0.50 | 6 | 4.600 | 2.500 | A, B, S, Z |
| 3.3 | B | T83B335(1)016(2)(3)(4)(5) | 0.50 | 6 | 3.500 | 2.000 | A, B, S, Z |
| 4.7 | A | T83A475(1)016(2)(3)(4)(5) | 0.80 | 6 | 5.000 | 2.500 | A, B, S, Z |
| 4.7 | B | T83B475(1)016(2)(3)(4)(5) | 0.80 | 6 | 2.900 | 1.500 | A, B, S, Z |
| 6.8 | C | T83C685(1)016(2)(3)(4)(5) | 1.1 | 6 | 1.900 | 0.600 | A, B, S, Z |
| 10 | A | T83A106(1)016(2)(6)(4)(5) | 1.6 | 6 | 3.000 | 1.700 | A, B, C, S, Z |
| 10 | B | T83B106(1)016(2)(3)(4)(5) | 1.6 | 6 | 2.800 | 0.500 | A, B, C, S, Z |
| 10 | C | T83C106(1)016(2)(3)(4)(5) | 1.6 | 6 | 1.800 | 0.450 | A, B, S, Z |
| 15 | B | T83B156(1)016(2)(6)(4)(5) | 2.4 | 6 | 2.000 | 0.800 | A, B, C, S, Z |
| 22 | B | T83B226(1)016(2)(6)(4)(5) | 3.5 | 6 | 1.900 | 1.000 | A, B, C, S, Z |
| 22 | C | T83C226(1)016(2)(6)(4)(5) | 3.5 | 6 | 1.100 | 0.375 | A, B, C, S, Z |
| 22 | D | T83D226(1)016(2)(3)(4)(5) | 3.5 | 6 | 0.800 | 0.250 | A, B, S, Z |
| 33 | B | T83B336(1)016(2)(3)(4)(5) | 5.3 | 6 | 1.800 | 0.500 | A, B, S, Z |
| 33 | C | T83C336(1)016(2)(3)(4)(5) | 5.3 | 6 | 1.100 | 0.300 | A, B, S, Z |
| 33 | D | T83D336(1)016(2)(3)(4)(5) | 5.3 | 6 | 0.700 | 0.225 | A, B, S, Z |
| 47 | C | T83C476(1)016(2)(3)(4)(5) | 7.5 | 6 | 1.000 | 0.300 | A, B, S, Z |
| 47 | D | T83D476(1)016(2)(6)(4)(5) | 7.5 | 6 | 0.700 | 0.150 | A, B, C, S, Z |
| 68 | D | T83D686(1)016(2)(3)(4)(5) | 10.9 | 6 | 0.600 | 0.150 | A, B, S, Z |
| 100 | D | T83D107(1)016(2)(6)(4)(5) | 16.0 | 8 | 0.600 | 0.125 | A, B, C, S, Z |
| 100 | E | T83E107(1)016(2)(3)(4)(5) | 16.0 | 8 | 0.600 | 0.100 | A, B, C, S, Z |
| 150 | E | T83E157(1)016(2)(3)(4)(5) | 24.0 | 8 | 0.500 | 0.150 | A, B, S, Z |
| 20 V_{DC} AT + 85 °C; 13 V_{DC} AT + 125 °C | | | | | | | |
| 0.47 | A | T83A474(1)020(2)(3)(4)(5) | 0.50 | 4 | 12.000 | 9.000 | A, B, S, Z |
| 0.68 | A | T83A684(1)020(2)(6)(4)(5) | 0.50 | 4 | 10.000 | 8.000 | A, B, C, S, Z |
| 1.0 | A | T83A105(1)020(2)(6)(4)(5) | 0.50 | 4 | 8.400 | 5.500 | A, B, C, S, Z |
| 1.5 | B | T83B155(1)020(2)(3)(4)(5) | 0.50 | 6 | 4.600 | 2.500 | A, B, S, Z |
| 2.2 | A | T83A225(1)020(2)(3)(4)(5) | 0.50 | 6 | 5.900 | 4.000 | A, B, S, Z |
| 2.2 | B | T83B225(1)020(2)(6)(4)(5) | 0.50 | 6 | 3.500 | 1.500 | A, B, C, S, Z |
| 3.3 | B | T83B335(1)020(2)(6)(4)(5) | 0.70 | 6 | 3.000 | 1.300 | A, B, C, S, Z |
| 4.7 | A | T83A475(1)020(2)(3)(4)(5) | 0.90 | 6 | 5.000 | 3.500 | A, B, S, Z |
| 4.7 | B | T83B475(1)020(2)(3)(4)(5) | 0.90 | 6 | 2.900 | 1.000 | A, B, S, Z |
| 4.7 | C | T83C475(1)020(2)(3)(4)(5) | 0.90 | 6 | 2.300 | 0.600 | A, B, S, Z |
| 6.8 | C | T83C685(1)020(2)(6)(4)(5) | 1.4 | 6 | 1.900 | 0.550 | A, B, C, S, Z |
| 10 | B | T83B106(1)020(2)(3)(4)(5) | 2.0 | 6 | 2.500 | 1.000 | A, B, S, Z |
| 10 | C | T83C106(1)020(2)(3)(4)(5) | 2.0 | 6 | 1.700 | 0.450 | A, B, S, Z |
| 15 | D | T83D156(1)020(2)(6)(4)(5) | 3.0 | 6 | 0.900 | 0.300 | A, B, C, S, Z |
| 22 | C | T83C226(1)020(2)(6)(4)(5) | 4.4 | 6 | 1.100 | 0.375 | A, B, C, S, Z |
| 22 | D | T83D226(1)020(2)(6)(4)(5) | 4.4 | 6 | 0.700 | 0.225 | A, B, C, S, Z |
| 33 | D | T83D336(1)020(2)(3)(4)(5) | 6.6 | 6 | 0.700 | 0.200 | A, B, S, Z |
| 47 | D | T83D476(1)020(2)(3)(4)(5) | 9.4 | 6 | 0.700 | 0.200 | A, B, S, Z |
| 47 | E | T83E476(1)020(2)(3)(4)(5) | 9.4 | 6 | 0.600 | 0.150 | A, B, S, Z |
| 68 | D | T83D686(1)020(2)(3)(4)(5) | 13.6 | 6 | 0.700 | 0.175 | A, B, S, Z |
| 68 | E | T83E686(1)020(2)(6)(4)(5) | 13.6 | 6 | 0.600 | 0.150 | A, B, C, S, Z |
| 100 | E | T83E107(1)020(2)(3)(4)(5) | 20.0 | 8 | 0.500 | 0.150 | A, B, S, Z |

Note

- Part number definitions:
 - (1) Capacitance tolerance: K, M
 - (2) Termination and packaging: C, E, K, H, L, M, U, R, N
 - (3) Reliability level: A, B, S, Z
 - (4) Surge current: A, B, C, Z, S
 - (5) ESR: L, S
 - (6) Reliability level: A, B, C, S, Z
 - (7) Reliability level: A, S, Z



| STANDARD RATINGS | | | | | | | |
|--|-----------|---------------------------|--------------------------------------|--|---|--|------------------------------------|
| CAPACITANCE (μ F) | CASE CODE | PART NUMBER | MAX. DCL AT + 25 °C (μ A) | MAX. DF AT + 25 °C 120 Hz (%) | STD. (S) MAX. ESR AT + 25 °C 100 kHz (Ω) | LOW (L) MAX. ESR AT + 25 °C 100 kHz (Ω) | AVAILABLE RELIABILITY LEVELS |
| 25 V_{DC} AT + 85 °C; 17 V_{DC} AT + 125 °C | | | | | | | |
| 0.33 | A | T83A334(1)025(2)(6)(4)(5) | 0.50 | 4 | 14.000 | 10.000 | A, B, C, S, Z |
| 0.47 | A | T83A474(1)025(2)(3)(4)(5) | 0.50 | 4 | 12.000 | 9.000 | A, B, S, Z |
| 0.68 | B | T83B684(1)025(2)(3)(4)(5) | 0.50 | 4 | 7.000 | 5.000 | A, B, S, Z |
| 1.0 | A | T83A105(1)025(2)(6)(4)(5) | 0.50 | 4 | 7.600 | 4.000 | A, B, C, S, Z |
| 1.0 | B | T83B105(1)025(2)(6)(4)(5) | 0.50 | 4 | 5.000 | 2.000 | A, B, C, S, Z |
| 1.5 | B | T83B155(1)025(2)(6)(4)(5) | 0.50 | 6 | 4.600 | 2.000 | A, B, C, S, Z |
| 2.2 | A | T83A225(1)025(2)(3)(4)(5) | 0.60 | 6 | 6.300 | 4.000 | A, B, S, Z |
| 2.2 | B | T83B225(1)025(2)(3)(4)(5) | 0.60 | 6 | 3.800 | 2.300 | A, B, S, Z |
| 2.2 | C | T83C225(1)025(2)(6)(4)(5) | 0.60 | 6 | 2.900 | 1.000 | A, B, C, S, Z |
| 3.3 | B | T83B335(1)025(2)(3)(4)(5) | 0.80 | 6 | 3.100 | 1.500 | A, B, S, Z |
| 3.3 | C | T83C335(1)025(2)(3)(4)(5) | 0.80 | 6 | 2.300 | 1.000 | A, B, S, Z |
| 4.7 | B | T83B475(1)025(2)(3)(4)(5) | 1.2 | 6 | 2.800 | 1.500 | A, B, S, Z |
| 4.7 | C | T83C475(1)025(2)(6)(4)(5) | 1.2 | 6 | 2.000 | 0.525 | A, B, C, S, Z |
| 6.8 | C | T83C685(1)025(2)(3)(4)(5) | 1.7 | 6 | 1.700 | 0.500 | A, B, S, Z |
| 6.8 | D | T83D685(1)025(2)(6)(4)(5) | 1.7 | 6 | 1.200 | 0.350 | A, B, C, S, Z |
| 10 | B | T83B106(1)025(2)(3)(4)(5) | 2.5 | 6 | 2.300 | 1.300 | A, B, S, Z |
| 10 | C | T83C106(1)025(2)(6)(4)(5) | 2.5 | 6 | 1.500 | 0.350 | A, B, C, S, Z |
| 10 | D | T83D106(1)025(2)(6)(4)(5) | 2.5 | 6 | 1.000 | 0.300 | A, B, C, S, Z |
| 15 | C | T83C156(1)025(2)(3)(4)(5) | 3.8 | 6 | 1.200 | 0.425 | A, B, S, Z |
| 15 | D | T83D156(1)025(2)(6)(4)(5) | 3.8 | 6 | 0.800 | 0.250 | A, B, C, S, Z |
| 22 | D | T83D226(1)025(2)(6)(4)(5) | 5.5 | 6 | 0.700 | 0.200 | A, B, C, S, Z |
| 33 | D | T83D336(1)025(2)(6)(4)(5) | 8.3 | 6 | 0.700 | 0.300 | A, B, C, S, Z |
| 33 | E | T83E336(1)025(2)(3)(4)(5) | 8.3 | 6 | 0.600 | 0.200 | A, B, S, Z |
| 47 | D | T83D476(1)025(2)(6)(4)(5) | 11.8 | 8 | 0.700 | 0.175 | A, B, C, S, Z |
| 47 | E | T83E476(1)025(2)(3)(4)(5) | 11.8 | 6 | 0.600 | 0.300 | A, B, S, Z |
| 35 V_{DC} AT + 85 °C; 23 V_{DC} AT + 125 °C | | | | | | | |
| 0.10 | A | T83A104(1)035(2)(6)(4)(5) | 0.50 | 4 | 20.000 | 10.000 | A, B, C, S, Z |
| 0.15 | A | T83A154(1)035(2)(6)(4)(5) | 0.50 | 4 | 18.000 | 6.000 | A, B, C, S, Z |
| 0.22 | A | T83A224(1)035(2)(6)(4)(5) | 0.50 | 4 | 15.000 | 6.000 | A, B, C, S, Z |
| 0.33 | A | T83A334(1)035(2)(6)(4)(5) | 0.50 | 4 | 13.000 | 6.000 | A, B, C, S, Z |
| 0.47 | A | T83A474(1)035(2)(3)(4)(5) | 0.50 | 4 | 10.000 | 4.000 | A, B, S, Z |
| 0.47 | B | T83B474(1)035(2)(6)(4)(5) | 0.50 | 4 | 8.000 | 2.500 | A, B, C, S, Z |
| 0.68 | B | T83B684(1)035(2)(6)(4)(5) | 0.50 | 4 | 6.500 | 2.500 | A, B, C, S, Z |
| 1.0 | A | T83A105(1)035(2)(3)(4)(5) | 0.50 | 4 | 7.500 | 6.000 | A, B, S, Z |
| 1.0 | B | T83B105(1)035(2)(6)(4)(5) | 0.50 | 4 | 5.000 | 2.000 | A, B, C, S, Z |
| 1.5 | B | T83B155(1)035(2)(3)(4)(5) | 0.50 | 6 | 4.200 | 2.000 | A, B, S, Z |
| 1.5 | C | T83C155(1)035(2)(3)(4)(5) | 0.50 | 6 | 3.800 | 1.500 | A, B, S, Z |
| 2.2 | B | T83B225(1)035(2)(3)(4)(5) | 0.80 | 6 | 3.800 | 2.300 | A, B, S, Z |
| 2.2 | C | T83C225(1)035(2)(6)(4)(5) | 0.80 | 6 | 2.900 | 0.900 | A, B, C, S, Z |

Note

- Part number definitions:
 - (1) Capacitance tolerance: K, M
 - (2) Termination and packaging: C, E, K, H, L, M, U, R, N
 - (3) Reliability level: A, B, S, Z
 - (4) Surge current: A, B, C, Z, S
 - (5) ESR: L, S
 - (6) Reliability level: A, B, C, S, Z
 - (7) Reliability level: A, S, Z



| STANDARD RATINGS | | | | | | | |
|--|-----------|---------------------------|--------------------------------------|--|---|--|------------------------------------|
| CAPACITANCE (μ F) | CASE CODE | PART NUMBER | MAX. DCL AT + 25 °C (μ A) | MAX. DF AT + 25 °C 120 Hz (%) | STD. (S) MAX. ESR AT + 25 °C 100 kHz (Ω) | LOW (L) MAX. ESR AT + 25 °C 100 kHz (Ω) | AVAILABLE RELIABILITY LEVELS |
| 35 V_{DC} AT + 85 °C; 23 V_{DC} AT + 125 °C | | | | | | | |
| 3.3 | B | T83B335(1)035(2)(3)(4)(5) | 1.2 | 6 | 3.500 | 1.500 | A, B, S, Z |
| 3.3 | C | T83C335(1)035(2)(6)(4)(5) | 1.2 | 6 | 2.100 | 0.700 | A, B, C, S, Z |
| 4.7 | C | T83C475(1)035(2)(6)(4)(5) | 1.6 | 6 | 1.900 | 0.600 | A, B, C, S, Z |
| 4.7 | D | T83D475(1)035(2)(3)(4)(5) | 1.6 | 6 | 1.300 | 0.600 | A, B, S, Z |
| 6.8 | C | T83C685(1)035(2)(3)(4)(5) | 2.4 | 6 | 1.800 | 0.900 | A, B, S, Z |
| 6.8 | D | T83D685(1)035(2)(6)(4)(5) | 2.4 | 6 | 1.100 | 0.300 | A, B, C, S, Z |
| 10 | C | T83C106(1)035(2)(3)(4)(5) | 3.5 | 6 | 1.600 | 0.450 | A, B, S, Z |
| 10 | D | T83D106(1)035(2)(3)(4)(5) | 3.5 | 6 | 0.800 | 0.250 | A, B, C, S, Z |
| 15 | D | T83D156(1)035(2)(3)(4)(5) | 5.3 | 6 | 0.700 | 0.300 | A, B, S, Z |
| 22 | D | T83D226(1)035(2)(3)(4)(5) | 7.7 | 6 | 0.600 | 0.400 | A, B, S, Z |
| 22 | E | T83E226(1)035(2)(3)(4)(5) | 7.7 | 6 | 0.600 | 0.300 | A, B, S, Z |
| 50 V_{DC} AT + 85 °C; 33 V_{DC} AT + 125 °C | | | | | | | |
| 0.10 | A | T83A104(1)050(2)(6)(4)(5) | 0.50 | 4 | 19.000 | 10.000 | A, B, C, S, Z |
| 0.15 | A | T83A154(1)050(2)(3)(4)(5) | 0.50 | 4 | 17.000 | 10.000 | A, B, S, Z |
| 0.15 | B | T83B154(1)050(2)(3)(4)(5) | 0.50 | 4 | 14.000 | 9.000 | A, B, S, Z |
| 0.22 | B | T83B224(1)050(2)(6)(4)(5) | 0.50 | 4 | 12.000 | 8.500 | A, B, C, S, Z |
| 0.33 | B | T83B334(1)050(2)(6)(4)(5) | 0.50 | 4 | 10.000 | 4.500 | A, B, C, S, Z |
| 0.47 | B | T83B474(1)050(2)(3)(4)(5) | 0.50 | 4 | 8.400 | 4.000 | A, B, S, Z |
| 0.47 | C | T83C474(1)050(2)(3)(4)(5) | 0.50 | 4 | 6.700 | 1.800 | A, B, S, Z |
| 0.68 | C | T83C684(1)050(2)(6)(4)(5) | 0.50 | 4 | 5.900 | 1.600 | A, B, C, S, Z |
| 1.0 | B | T83B105(1)050(2)(3)(4)(5) | 0.50 | 4 | 6.700 | 2.000 | A, B, S, Z |
| 1.0 | C | T83C105(1)050(2)(6)(4)(5) | 0.50 | 4 | 4.600 | 1.600 | A, B, C, S, Z |
| 1.5 | C | T83C155(1)050(2)(3)(4)(5) | 0.80 | 6 | 3.400 | 1.500 | A, B, S, Z |
| 1.5 | D | T83D155(1)050(2)(6)(4)(5) | 0.80 | 6 | 2.900 | 1.000 | A, B, C, S, Z |
| 2.2 | C | T83C225(1)050(2)(3)(4)(5) | 1.1 | 6 | 2.900 | 1.500 | A, B, S, Z |
| 2.2 | D | T83D225(1)050(2)(6)(4)(5) | 1.1 | 6 | 2.100 | 0.800 | A, B, C, S, Z |
| 3.3 | D | T83D335(1)050(2)(6)(4)(5) | 1.7 | 6 | 1.700 | 0.800 | A, B, C, S, Z |
| 4.7 | D | T83D475(1)050(2)(6)(4)(5) | 2.4 | 6 | 1.200 | 0.300 | A, B, C, S, Z |
| 6.8 | E | T83E685(1)050(2)(3)(4)(5) | 3.4 | 6 | 0.900 | 0.540 | A, B, S, Z |
| 10 | E | T83E106(1)050(2)(3)(4)(5) | 5.0 | 6 | 0.800 | 0.550 | A, B, S, Z |
| 15 | E | T83E156(1)050(2)(3)(4)(5) | 7.5 | 6 | 0.800 | 0.350 | A, B, C, S, Z |
| 63 V_{DC} AT + 85 °C; 41.6 V_{DC} AT + 125 °C | | | | | | | |
| 4.7 | D | T83D475(1)063(2)(7)(4)(5) | 3.0 | 6 | 1.100 | 0.700 | A, S, Z |
| 10 | E | T83E106(1)063(2)(7)(4)(5) | 6.3 | 6 | 1.000 | 0.600 | A, S, Z |

Note

- Part number definitions:
 - Capacitance tolerance: K, M
 - Termination and packaging: C, E, K, H, L, M, U, R, N
 - Reliability level: A, B, S, Z
 - Surge current: A, B, C, Z, S
 - ESR: L, S
 - Reliability level: A, B, C, S, Z
 - Reliability level: A, S, Z



| RECOMMENDED VOLTAGE DERATING GUIDELINES (for temperatures below + 85 °C) | |
|---|-------------------|
| STANDARD CONDITIONS. FOR EXAMPLE: OUTPUT FILTERS | |
| Capacitor Voltage Rating | Operating Voltage |
| 4.0 | 2.5 |
| 6.3 | 3.3 |
| 10 | 5.0 |
| 16 | 8.0 |
| 20 | 10 |
| 25 | 12 |
| 35 | 15 |
| 50 | 24 |
| 63 | 32 |
| SEVERE CONDITIONS. FOR EXAMPLE: INPUT FILTERS | |
| Capacitor Voltage Rating | Operating Voltage |
| 4.0 | 2.5 |
| 6.3 | 3.6 |
| 10 | 6.0 |
| 16 | 10 |
| 20 | 12 |
| 25 | 15 |
| 35 | 24 |
| 50 | 28 |
| 63 | 38 |

| POWER DISSIPATION | |
|--------------------------|--|
| CASE CODE | MAXIMUM PERMISSIBLE POWER DISSIPATION AT + 25 °C (W) IN FREE AIR |
| A | 0.075 |
| B | 0.085 |
| C | 0.110 |
| D | 0.150 |
| E | 0.165 |

| STANDARD PACKAGING QUANTITY | | | |
|------------------------------------|----------------|--------------|-----------------|
| CASE CODE | UNITS PER REEL | | |
| | 7" FULL REEL | 7" HALF REEL | 7" PARTIAL REEL |
| A | 2000 | 1000 | 100 |
| B | 2000 | 1000 | 100 |
| C | 500 | 250 | 100 |
| D | 500 | 250 | 100 |
| E | 400 | 200 | 100 |

| PRODUCT INFORMATION | |
|------------------------------------|--|
| COTS Guide for Tantalum Capacitors | www.vishay.com/doc?40083 |
| Pad Dimensions | |
| Packaging Dimensions | |
| Moisture Sensitivity | www.vishay.com/doc?40135 |
| SELECTOR GUIDES | |
| Solid Tantalum Selector Guide | www.vishay.com/doc?49053 |
| FAQ | |
| Frequently Asked Questions | www.vishay.com/doc?40110 |



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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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