TANTAMOUNT® Low ESR, Hi-Rel COTS, Built-In Fuse Conformal Coated



FEATURES

- High reliability; Weibull grading available
- Surge Current Testing per MIL-PRF-55365 options available
- Standard and Low ESR options
- Terminations: SnPb, Standard. 100 % Tin available
- Circuit protection for mission or safety critical systems
- Fuse characteristics: Guaranteed fuse protection at 9 A, 100 ms

Pb-free Available

RoHS* COMPLIANT

PERFORMANCE/ELECTRICAL CHARACTERISTICS

Operating Temperature: - 55 °C to + 85 °C
(To + 125 °C with voltage derating)

Capacitance Range: 10 µF to 680 µF

Capacitance Tolerance: ± 20 %, ± 10 % standard

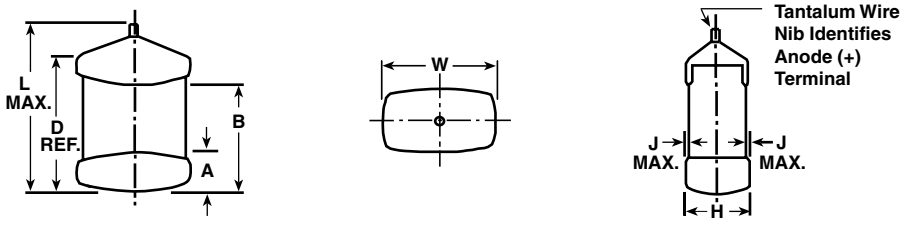
Voltage Rating: 4 WVDC to 50 WVDC

ORDERING INFORMATION

T96	R	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 %	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)	E: Sn/Pb Solder/7" (178 mm) reels L: Sn/Pb Solder/7" (178 mm) ½ reel C: 100 % Tin/7" (178 mm) reels H: 100 % Tin/7" (178 mm) ½ reel	A = 1.0 % Weibull B = 0.1 % Weibull (1) S = 40 h Burn-in Z = Non-Established Reliability	A = 10 cycles at + 25 °C B = 10 cycles at - 55 °C/+ 85 °C S = 3 cycles at + 25 °C	S = Std L = Low

Note: (1) Weibull 0.1 % may not be available on all ratings. See detailed notes in ratings table or contact marketing for availability

DIMENSIONS in inches [millimeters]



CASE CODE	L (MAX.)	W	H	A	B	D (REF.)	J (MAX.)
R	0.283 [7.2]	0.235 + 0.012/- 0.024 [6.0 + 0.3/- 0.6]	0.136 ± 0.012 [3.5 ± 0.3]	0.051 ± 0.012 [1.3 ± 0.30]	0.180 ± 0.024 [4.6 ± 0.6]	0.243 [6.2]	0.004 [0.1]

Note: The anode termination (D less B) will be a minimum of 0.010" (0.25 mm)

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

RATINGS AND CASE CODES

µF	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V	50 V
10								R
15							R	R
22							R	R
33						R	R	
47					R			
68				R		R		
100			R		R	R		
120			R		R			
150			R		R			
180		R		R				
220		R	R	R				
330	R		R	R				
390		R						
680		R	R					

Note:
• All ratings are preliminary, contact marketing for availability

STANDARD/EXTENDED RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	STD.(S) MAX. ESR AT + 25 °C 100 kHz (Ω)	(PRELIMINARY) LOW (L) MAX. ESR AT + 25 °C 100 kHz
4 WVDC AT + 85 °C, SURGE = 5.2 V . . . 2.7 WVDC AT + 125 °C, SURGE = 3.4 V						
330	R	T96R337(1)004(2)(3)(4)(5)	13.2	8	0.160	0.110
6.3 WVDC AT + 85 °C, SURGE = 8 V . . . 4 WVDC AT 125 °C, SURGE = 5 V						
180	R	T96R187(1)6R3(2)(3)(4)(5)	10.8	8	0.160	0.110
220	R	T96R227(1)6R3(2)(3)(4)(5)	13.2	8	0.160	0.110
390	R	T96R397(1)6R3(2)(3)(4)(5)	23.4	8	0.160	0.075
680	R	T96R687(1)6R3(2)(3)(4)(5)	40.8	12	0.120	0.075
10 WVDC AT + 85 °C, SURGE = 13 V . . . 7 WVDC AT 125 °C, SURGE = 8 V						
100	R	T96R107(1)010(2)(3)(4)(5)	10.0	8	0.170	0.105
120	R	T96R127(1)010(2)(3)(4)(5)	12.0	8	0.170	0.100
150	R	T96R157(1)010(2)(3)(4)(5)	15.0	8	0.160	0.095
220	R	T96R227(1)010(2)(3)(4)(5)	22.0	8	0.160	0.085
330	R	T96R337(1)010(2)(3)(4)(5)	33.0	8	0.160	0.085
680	R	T96R687(1)010(2)(3)(4)S	68.0	14	0.120	N/A
16 WVDC AT + 85 °C, SURGE = 20 V . . . 10 WVDC AT + 125 °C, SURGE = 12 V						
68	R	T96R686(1)016(2)(3)(4)(5)	10.9	6	0.630	0.125
180	R	T96R187(1)016(2)(3)(4)(5)	28.8	8	0.160	0.085
220	R	T96R227(1)016(2)(3)(4)(5)	35.2	8	0.150	0.085
330	R	T96R337(1)016(2)(3)(4)(5)	52.8	14	0.140	0.085
20 WVDC AT + 85 °C, SURGE = 26 V . . . 13 WVDC AT + 125 °C, SURGE = 16 V						
47	R	T96R476(1)020(2)(3)(4)(5)	9.4	6	0.230	0.140
100	R	T96R107(1)020(2)(3)(4)S	20.0	8	0.170	N/A
120	R	T96R127(1)020(2)(3)(4)(5)	24.0	8	0.170	0.110
150	R	T96R157(1)020(2)(3)(4)(5)	30.0	8	0.170	0.105

Notes:
• All ratings are preliminary, contact factory for availability
(1) Capacitance Tolerance: K, M
(2) Termination and Packaging: C, E, H, L
(3) Reliability Level: A, B, S, Z
(4) Surge Current: A, B, S
(5) ESR: L, S

STANDARD/EXTENDED RATINGS						
25 WVDC AT + 85 °C, SURGE = 32 V . . . 17 WVDC AT + 125 °C, SURGE = 20 V						
33	R	T96R336(1)025(2)(3)(4)(5)	8.3	6	0.280	0.160
68	R	T96R686(1)025(2)(3)(4)(5)	17.0	6	0.230	0.125
100	R	T96R107(1)025(2)(3)(4)(5)	25	8	0.230	0.120
35 WVDC AT + 85 °C, SURGE = 46 V . . . 23 WVDC AT + 125 °C, SURGE = 28 V						
15	R	T96R156(1)035(2)(3)(4)(5)	5.3	6	0.410	0.220
22	R	T96R226(1)035(2)(3)(4)(5)	7.7	6	0.310	0.270
33	R	T96R336(1)035(2)(3)(4)(5)	11.6	6	0.310	0.230
50 WVDC AT + 85 °C, SURGE = 65 V . . . 33 WVDC AT + 125 °C, SURGE = 40 V						
10	R	T96R106(1)050(2)(3)(4)(5)	5.0	6	0.680	0.530
15	R	T96R156(1)050(2)(3)(4)(5)	7.5	6	0.430	0.380
22	R	T96R226(1)050(2)(3)(4)(5)	11.0	6	0.420	0.330

Notes:

• All ratings are preliminary, contact factory for availability

(1) Capacitance Tolerance: K, M

(2) Termination and Packaging: C, E, H, L

(3) Reliability Level: A, B, S, Z

(4) Surge Current: A, B, S

(5) ESR: L, S

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All product specifications and data are subject to change without notice.

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