Solid Tantalum Surface Mount Capacitors
TANTAMOUNT®, Molded Case, Low ESR

FEATURES

- Terminations: 100 % matte tin, standard tin/lead available
- Molded case available in seven case codes
- Compatible with "High Volume" automatic pick and place equipment
- Mounting: Surface mount
- High ripple current carrying capability
- Low ESR
- Meets EIA 535BAAC and IEC specification QC300801/US0001
- 100 % surge current tested (C, D, and E case sizes)
- Moisture sensitivity level 1
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available

RoHS* COMPLIANT

Note

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

PERFORMANCE CHARACTERISTICS

www.vishay.com/doc?40088

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

Capacitance Range: 0.47 µF to 1000 µF
Capacitance Tolerance: ± 10 %, ± 20 %
Voltage Rating: 4 V_{DC} to 63 V_{DC}

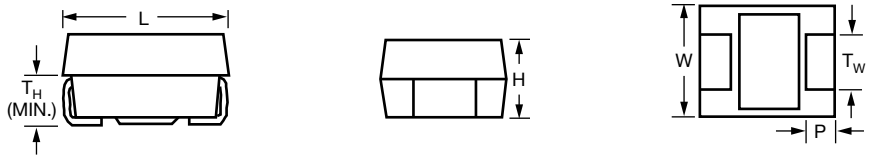
ORDERING INFORMATION

TR3	D	107	K	010	C	0100
TYPE	CASE CODE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	TERMINATION AND PACKAGING	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 V. To complete the three-digit block, zeros precede the voltage rating. A decimal point is indicated by an "R" (6R3 = 6.3 V).	C = Matte tin/7" (178 mm) reels D = Matte tin/13" (330 mm) reels E = Tin/lead/7" (178 mm) reels F = Tin/lead/13" (330 mm) reels	Maximum 100 kHz ESR in mΩ. See note below.

Notes

- We reserve the right to supply higher voltage ratings and tighter capacitance tolerance capacitors in the same case size. Voltage substitutions will be marked with the higher voltage rating.
  The EIA and CECC standards for low ESR solid tantalum chip capacitors, allow delta ESR of 1.25 times the datasheet limit after mounting.
- Dry pack is available per request, contact regional marketing.

DIMENSIONS in inches [millimeters]

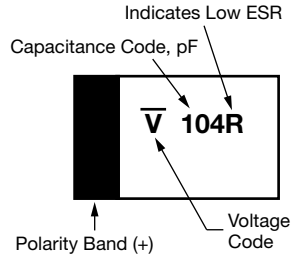


CASE CODE	EIA SIZE	L	W	H	P	T_W	T_H (MIN.)
A	3216-18	0.126 ± 0.008 [3.2 ± 0.20]	0.063 ± 0.008 [1.6 ± 0.20]	0.063 ± 0.008 [1.6 ± 0.20]	0.031 ± 0.012 [0.80 ± 0.30]	0.047 ± 0.004 [1.2 ± 0.10]	0.028 [0.70]
B	3528-21	0.138 ± 0.008 [3.5 ± 0.20]	0.110 ± 0.008 [2.8 ± 0.20]	0.075 ± 0.008 [1.9 ± 0.20]	0.031 ± 0.012 [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]	0.170 ± 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]
V	7343-20	0.287 ± 0.012 [7.3 ± 0.30]	0.169 ± 0.012 [4.3 ± 0.30]	0.079 max. [2.0 max.]	0.051 ± 0.012 [1.3 ± 0.30]	0.094 ± 0.004 [2.4 ± 0.10]	0.039 [1.0]
W	7361-38	0.287 ± 0.012 [7.3 ± 0.30]	0.236 ± 0.012 [6.0 ± 0.30]	0.138 ± 0.012 [3.5 ± 0.30]	0.047 ± 0.008 [1.2 ± 0.20]	0.122 ± 0.004 [3.1 ± 0.10]	0.069 [1.75]

RATINGS AND CASE CODES

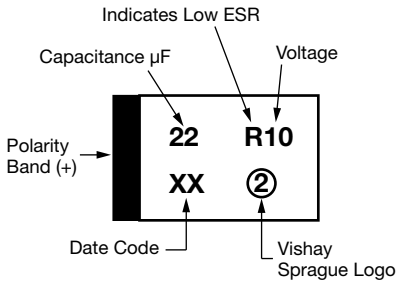
µF	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V	50 V	63 V
0.47							A		
0.68							A		
1.0					A	A	A/B	B/C	
1.5						A	B/C	B/C	
2.2			A	A	A	A/B	B/C	B/C/D	
3.3				A	A/B	A/B	B/C	C/D	
4.7			A	A/B	A/B	A/B/C	B/C/D	C/D/E	D
6.8			A	A/B	A/B	B/C	C/D/E	D/E	
10		A	A/B	A/B/C	B/C	B/C/D	C/D/E	D/E	E
15	A	A	A/B	B/C	B/C	B/C/D	D/E	E	
22	A	A/B	A/B/C	B/C/D	B/C/D	C/D/E/V	D/E		
33	A/B	A/B	B/C	B/C/D	C/D	D/E			
47	A/B	A/B/C	B/C/D	C/D	D/E	D/E			
68	B/C	B/C/D	B/C/D/E/V	D	D/E	E/W			
100	A/B/C	B/C/D/V	B/C/D/E/V	D/E	D/E/W	W			
150	B/C/D	C/D/E	C/D/E	D/E	W				
220	B/C/D	C/D/E/V	D/E/V	E					
330	D	D/E/W	D/E/W						
470	D/E	D/E/W	E/W						
680	D/E	E							
1000	E	E							

MARKING



A Case

"A" CASE VOLTAGE CODE	
VOLTS	CODE
4.0	G
6.3	J
10	A
16	C
20	D
25	E
35	V
50	T



B, C, D, E, V Cases

Marking

Capacitor marking includes an anode (+) polarity band, capacitance in microfarads and the voltage rating. "A" Case capacitors use a letter code for the voltage and EIA capacitance code.
The Vishay Sprague® trademark is included if space permits. Capacitors rated at 6.3 V are marked 6 V.
A manufacturing date code is marked on all capacitors.
Call the factory for further explanation.

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
4 V_{DC} AT + 85 °C; 2.7 V_{DC} AT + 125 °C						
15	A	TR3A156(1)004(2)1500	0.6	6	1.500	0.22
22	A	TR3A226(1)004(2)1500	0.9	6	1.500	0.22
33	A	TR3A336(1)004(2)1500	1.3	6	1.500	0.22
33	B	TR3B336(1)004(2)0500	1.3	6	0.500	0.41
47	A	TR3A476(1)004(2)0800	1.9	14	0.800	0.31
47	A	TR3A476(1)004(2)0500	1.9	14	0.500	0.39
47	B	TR3B476(1)004(2)0500	1.9	6	0.500	0.41
68	B	TR3B686(1)004(2)0500	2.7	6	0.500	0.41
68	C	TR3C686(1)004(2)0275	2.7	6	0.275	0.63
100	A	TR3A107M004(2)1000	10.0	30	1.000	0.27
100	B	TR3B107(1)004(2)0450	4.0	8	0.450	0.43
100	C	TR3C107(1)004(2)0225	4.0	6	0.225	0.70
150	B	TR3B157(1)004(2)0900	6.0	14	0.900	0.31
150	B	TR3B157(1)004(2)0500	6.0	14	0.500	0.41
150	B	TR3B157(1)004(2)0400	6.0	14	0.400	0.46
150	C	TR3C157(1)004(2)0250	6.0	12	0.250	0.66
150	D	TR3D157(1)004(2)0150	6.0	8	0.150	1.00
220	B	TR3B227M004(2)1100	8.8	18	1.100	0.28
220	B	TR3B227M004(2)0700	8.8	18	0.700	0.35
220	B	TR3B227M004(2)0500	8.8	18	0.500	0.41
220	B	TR3B227M004(2)0450	8.8	18	0.450	0.43
220	C	TR3C227(1)004(2)0200	8.8	8	0.200	0.74
220	D	TR3D227(1)004(3)0050	8.8	8	0.050	1.73
220	D	TR3D227(1)004(2)0150	8.8	8	0.150	1.00
220	D	TR3D227(1)004(2)0100	8.8	8	0.100	1.22
330	D	TR3D337(1)004(2)0100	13.2	8	0.100	1.22
330	D	TR3D337(1)004(3)0045	13.2	8	0.045	1.83
330	D	TR3D337(1)004(3)0035	13.2	8	0.035	2.07
330	D	TR3D337(1)004(2)0150	13.2	8	0.150	1.00
470	D	TR3D477(1)004(2)0125	18.8	10	0.125	1.10
470	D	TR3D477(1)004(2)0100	18.8	10	0.100	1.22
470	D	TR3D477(1)004(2)0060	18.8	10	0.060	1.58
470	D	TR3D477(1)004(3)0045	18.8	10	0.045	1.83
470	D	TR3D477(1)004(3)0035	18.8	10	0.035	2.07
470	E	TR3E477(1)004(2)0100	18.8	10	0.100	1.28
470	E	TR3E477(1)004(3)0045	18.8	10	0.045	1.91
470	E	TR3E477(1)004(3)0035	18.8	10	0.035	2.17
680	D	TR3D687M004(2)0100	27.2	25	0.100	1.22
680	D	TR3D687M004(3)0060	27.2	25	0.060	1.58
680	E	TR3E687(1)004(2)0100	27.2	12	0.100	1.28
1000	E	TR3E108M004(2)0100	40.0	20	0.100	1.28
6.3 V_{DC} AT + 85 °C; 4 V_{DC} AT 125 °C						
10	A	TR3A106(1)6R3(2)2000	0.6	6	2.000	0.19
10	A	TR3A106(1)6R3(2)1500	0.6	6	1.500	0.22
15	A	TR3A156(1)6R3(2)2000	0.9	6	2.000	0.19
15	A	TR3A156(1)6R3(2)1000	0.9	6	1.000	0.27
22	A	TR3A226(1)6R3(2)3000	1.4	6	3.000	0.16
22	A	TR3A226(1)6R3(2)2000	1.4	6	2.000	0.19

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
6.3 V_{DC} AT + 85 °C; 4 V_{DC} AT 125 °C						
22	A	TR3A226(1)6R3(2)1000	1.4	6	1.000	0.27
22	A	TR3A226(1)6R3(2)0900	1.4	6	0.900	0.29
22	B	TR3B226(1)6R3(2)0600	1.4	6	0.600	0.38
33	A	TR3A336(1)6R3(2)2000	2.0	14	2.000	0.19
33	A	TR3A336(1)6R3(2)0800	2.0	14	0.800	0.31
33	A	TR3A336(1)6R3(2)0600	2.0	14	0.600	0.35
33	B	TR3B336(1)6R3(2)0450	2.0	6	0.450	0.43
33	B	TR3B336(1)6R3(2)0350	2.0	6	0.350	0.49
33	B	TR3B336(1)6R3(2)0600	2.0	6	0.600	0.38
33	B	TR3B336(1)6R3(2)0500	2.0	6	0.500	0.41
47	A	TR3A476(1)6R3(2)0800	3.0	12	0.800	0.31
47	B	TR3B476(1)6R3(2)0550	3.0	6	0.550	0.39
47	B	TR3B476(1)6R3(2)0500	3.0	6	0.500	0.41
47	B	TR3B476(1)6R3(2)0350	3.0	6	0.350	0.49
47	B	TR3B476(1)6R3(2)0250	3.0	6	0.250	0.58
47	C	TR3C476(1)6R3(2)0300	3.0	6	0.300	0.61
47	C	TR3C476(1)6R3(2)0250	3.0	6	0.250	0.66
68	B	TR3B686(1)6R3(2)0650	4.3	6	0.650	0.36
68	B	TR3B686(1)6R3(2)0550	4.3	6	0.550	0.39
68	B	TR3B686(1)6R3(2)0500	4.3	6	0.500	0.41
68	B	TR3B686(1)6R3(2)0350	4.3	6	0.350	0.49
68	B	TR3B686(1)6R3(2)0250	4.3	6	0.250	0.58
68	C	TR3C686(1)6R3(2)0275	4.3	6	0.275	0.63
68	C	TR3C686(1)6R3(2)0250	4.3	6	0.250	0.66
68	C	TR3C686(1)6R3(2)0200	4.3	6	0.200	0.74
68	D	TR3D686(1)6R3(2)0200	4.3	6	0.200	0.87
68	D	TR3D686(1)6R3(2)0175	4.3	4	0.175	0.93
100	B	TR3B107(1)6R3(2)1500	6.3	15	1.500	0.24
100	B	TR3B107(1)6R3(2)0500	6.3	15	0.500	0.41
100	B	TR3B107(1)6R3(2)0400	6.3	15	0.400	0.46
100	C	TR3C107(1)6R3(2)0300	6.3	6	0.300	0.61
100	C	TR3C107(1)6R3(2)0250	6.3	6	0.250	0.66
100	C	TR3C107(1)6R3(2)0150	6.3	6	0.150	0.86
100	C	TR3C107(1)6R3(2)0125	6.3	6	0.125	0.94
100	D	TR3D107(1)6R3(2)0150	6.3	6	0.150	1.00
100	D	TR3D107(1)6R3(2)0140	6.3	6	0.140	1.04
100	V	TR3V107(1)6R3(3)0200	6.3	8	0.200	0.79
100	V	TR3V107(1)6R3(3)0150	6.3	8	0.150	0.91
150	C	TR3C157(1)6R3(2)0300	9.4	8	0.300	0.61
150	C	TR3C157(1)6R3(2)0200	9.4	8	0.200	0.74
150	D	TR3D157(1)6R3(2)0150	9.4	8	0.150	1.00
150	D	TR3D157(1)6R3(2)0125	9.4	8	0.125	1.10
150	D	TR3D157(1)6R3(2)0075	9.4	8	0.075	1.41
150	D	TR3D157(1)6R3(2)0070	9.4	8	0.070	1.46
150	D	TR3D157(1)6R3(3)0050	9.4	8	0.050	1.73
150	E	TR3E157(1)6R3(2)0100	9.4	8	0.100	1.28
220	C	TR3C227(1)6R3(2)0300	13.9	14	0.300	0.61
220	C	TR3C227(1)6R3(2)0250	13.9	14	0.250	0.66
220	C	TR3C227(1)6R3(2)0225	13.9	14	0.225	0.70
220	D	TR3D227(1)6R3(2)0150	13.9	8	0.150	1.00

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
6.3 V_{DC} AT + 85 °C; 4 V_{DC} AT 125 °C						
220	D	TR3D227(1)6R3(2)0100	13.9	8	0.100	1.22
220	D	TR3D227(1)6R3(3)0050	13.9	8	0.050	1.73
220	E	TR3E227(1)6R3(2)0150	13.9	8	0.150	1.05
220	E	TR3E227(1)6R3(2)0100	13.9	8	0.100	1.28
220	V	TR3V227(1)6R3(3)0100	13.9	10	0.100	1.12
220	V	TR3V227(1)6R3(3)0150	13.9	10	0.150	0.91
330	D	TR3D337(1)6R3(2)0150	20.8	8	0.150	1.00
330	D	TR3D337(1)6R3(2)0125	20.8	8	0.125	1.10
330	D	TR3D337(1)6R3(2)0100	20.8	8	0.100	1.22
330	D	TR3D337(1)6R3(2)0060	20.8	8	0.060	1.58
330	D	TR3D337(1)6R3(3)0050	20.8	8	0.050	1.73
330	D	TR3D337(1)6R3(3)0045	20.8	8	0.045	1.83
330	D	TR3D337(1)6R3(3)0035	20.8	8	0.035	2.07
330	E	TR3E337(1)6R3(2)0150	20.8	8	0.150	1.05
330	E	TR3E337(1)6R3(2)0100	20.8	8	0.100	1.28
330	E	TR3E337(1)6R3(2)0050	20.8	8	0.050	1.82
330	W	TR3W337(1)6R3(3)0100	20.8	8	0.100	1.58
330	W	TR3W337(1)6R3(3)0060	20.8	8	0.060	2.04
470	D	TR3D477(1)6R3(2)0200	29.6	14	0.200	0.87
470	D	TR3D477(1)6R3(2)0150	29.6	14	0.150	1.00
470	D	TR3D477(1)6R3(2)0125	29.6	14	0.125	1.10
470	D	TR3D477(1)6R3(3)0100	29.6	14	0.100	1.22
470	E	TR3E477(1)6R3(2)0100	29.6	10	0.100	1.28
470	E	TR3E477(1)6R3(3)0065	29.6	10	0.065	1.59
470	E	TR3E477(1)6R3(3)0060	29.6	10	0.060	1.66
470	E	TR3E477(1)6R3(3)0050	29.6	10	0.050	1.82
470	W	TR3W477(1)6R3(3)0100	29.6	20	0.100	1.58
470	W	TR3W477(1)6R3(3)0060	29.6	20	0.060	2.04
470	W	TR3W477(1)6R3(3)0050	29.6	20	0.050	2.24
680	E	TR3E687(1)6R3(2)0100	42.8	20	0.100	1.28
1000	E	TR3E108M6R3(2)0200	63.0	30	0.200	0.91
1000	E	TR3E108M6R3(2)0150	63.0	30	0.150	1.05
1000	E	TR3E108M6R3(3)0100	63.0	30	0.100	1.28
10 V_{DC} AT + 85 °C; 7 V_{DC} AT 125 °C						
2.2	A	TR3A225(1)010(2)6800	0.5	6	6.800	0.11
2.2	A	TR3A225(1)010(2)6000	0.5	6	6.000	0.11
2.2	A	TR3A225(1)010(2)1800	0.5	6	1.800	0.20
4.7	A	TR3A475(1)010(2)3000	0.5	6	3.000	0.16
4.7	A	TR3A475(1)010(2)1500	0.5	6	1.500	0.22
4.7	A	TR3A475(1)010(2)1400	0.5	6	1.400	0.23
4.7	A	TR3A475(1)010(2)1000	0.5	6	1.000	0.27
6.8	A	TR3A685(1)010(2)1800	0.7	6	1.800	0.20
6.8	A	TR3A685(1)010(2)3000	0.7	6	3.000	0.16
10	A	TR3A106(1)010(2)2000	1.0	6	2.000	0.19
10	A	TR3A106(1)010(2)1800	1.0	6	1.800	0.20
10	A	TR3A106(1)010(2)1000	1.0	6	1.000	0.27
10	A	TR3A106(1)010(2)0900	1.0	6	0.900	0.29
10	B	TR3B106(1)010(2)1000	1.0	6	1.000	0.29
10	B	TR3B106(1)010(2)0800	1.0	6	0.800	0.33
10	B	TR3B106(1)010(2)0750	1.0	6	0.750	0.34
15	A	TR3A156(1)010(2)2000	1.5	6	2.000	0.19

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
		10 V_{DC} AT + 85 °C; 7 V_{DC} AT 125 °C				
15	A	TR3A156(1)010(2)1000	1.5	6	1.000	0.27
15	B	TR3B156(1)010(2)0600	1.5	6	0.600	0.38
15	B	TR3B156(1)010(2)0450	1.5	6	0.450	0.43
15	B	TR3B156(1)010(2)0700	1.5	6	0.700	0.35
22	A	TR3A226(1)010(2)1500	2.2	8	1.500	0.22
22	A	TR3A226(1)010(2)1000	2.2	8	1.000	0.27
22	A	TR3A226(1)010(2)0900	2.2	8	0.900	0.29
22	A	TR3A226(1)010(2)0800	2.2	8	0.800	0.31
22	B	TR3B226(1)010(2)1000	2.2	6	1.000	0.29
22	B	TR3B226(1)010(2)0700	2.2	6	0.700	0.35
22	B	TR3B226(1)010(2)0500	2.2	6	0.500	0.41
22	B	TR3B226(1)010(2)0400	2.2	6	0.400	0.46
22	C	TR3C226(1)010(2)0400	2.2	6	0.400	0.52
22	C	TR3C226(1)010(2)0345	2.2	6	0.345	0.56
22	C	TR3C226(1)010(2)0300	2.2	6	0.300	0.61
33	B	TR3B336(1)010(2)0425	3.3	6	0.425	0.45
33	B	TR3B336(1)010(2)1400	3.3	6	1.400	0.25
33	B	TR3B336(1)010(2)0650	3.3	6	0.650	0.36
33	B	TR3B336(1)010(2)0600	3.3	6	0.600	0.38
33	B	TR3B336(1)010(2)0500	3.3	6	0.500	0.41
33	B	TR3B336(1)010(2)0300	3.3	6	0.300	0.53
33	C	TR3C336(1)010(2)0375	3.3	6	0.375	0.54
33	C	TR3C336(1)010(2)0300	3.3	6	0.300	0.61
47	B	TR3B476(1)010(2)0600	4.7	6	0.600	0.38
47	B	TR3B476(1)010(2)0500	4.7	6	0.500	0.41
47	B	TR3B476(1)010(2)0350	4.7	6	0.350	0.49
47	B	TR3B476(1)010(2)0650	4.7	6	0.650	0.36
47	C	TR3C476(1)010(2)0200	4.7	6	0.200	0.74
47	C	TR3C476(1)010(2)0350	4.7	6	0.350	0.56
47	C	TR3C476(1)010(2)0300	4.7	6	0.300	0.61
47	D	TR3D476(1)010(2)0220	4.7	6	0.220	0.83
47	D	TR3D476(1)010(2)0200	4.7	6	0.200	0.87
47	D	TR3D476(1)010(2)0140	4.7	6	0.140	1.04
47	D	TR3D476(1)010(2)0135	4.7	6	0.135	1.05
47	D	TR3D476(1)010(2)0100	4.7	6	0.100	1.22
68	B	TR3B686(1)010(2)1500	6.8	14	1.500	0.24
68	B	TR3B686(1)010(2)0900	6.8	14	0.900	0.31
68	B	TR3B686(1)010(2)0750	6.8	14	0.750	0.34
68	B	TR3B686(1)010(2)0600	6.8	14	0.600	0.38
68	C	TR3C686(1)010(2)0200	6.8	6	0.200	0.74
68	C	TR3C686(1)010(2)0300	6.8	6	0.300	0.61
68	C	TR3C686(1)010(2)0275	6.8	6	0.275	0.63
68	C	TR3C686(1)010(2)0225	6.8	6	0.225	0.70
68	D	TR3D686(1)010(2)0200	6.8	6	0.200	0.87
68	D	TR3D686(1)010(2)0150	6.8	6	0.150	1.00
68	D	TR3D686(1)010(2)0100	6.8	6	0.100	1.22
68	D	TR3D686(1)010(3)0070	6.8	6	0.070	1.46

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
10 V_{DC} AT + 85 °C; 7 V_{DC} AT 125 °C						
68	E	TR3E686(1)010(2)0150	6.8	4	0.150	1.05
68	V	TR3V686(1)010(3)0700	6.8	6	0.700	0.42
68	V	TR3V686(1)010(3)0300	6.8	6	0.300	0.65
68	V	TR3V686(1)010(3)0200	6.8	6	0.200	0.79
68	V	TR3V686(1)010(3)0140	6.8	6	0.140	0.94
68	V	TR3V686(1)010(3)0100	6.8	6	0.100	1.12
100	B	TR3B107M010(2)1400	10.0	25	1.400	0.25
100	C	TR3C107(1)010(2)0200	10.0	8	0.200	0.74
100	C	TR3C107(1)010(2)0150	10.0	8	0.150	0.86
100	C	TR3C107(1)010(2)0100	10.0	8	0.100	1.05
100	D	TR3D107(1)010(2)0150	10.0	6	0.150	1.00
100	D	TR3D107(1)010(2)0100	10.0	6	0.100	1.22
100	D	TR3D107(1)010(2)0080	10.0	6	0.080	1.37
100	D	TR3D107(1)010(3)0070	10.0	6	0.070	1.52
100	D	TR3D107(1)010(3)0065	10.0	6	0.065	1.46
100	D	TR3D107(1)010(3)0050	10.0	6	0.050	1.73
100	E	TR3E107(1)010(2)0125	10.0	6	0.125	1.15
100	E	TR3E107(1)010(2)0150	10.0	6	0.150	1.05
100	E	TR3E107(1)010(2)0100	10.0	6	0.100	1.28
100	V	TR3V107(1)010(3)0400	10.0	8	0.400	0.56
100	V	TR3V107(1)010(3)0200	10.0	8	0.200	0.79
100	V	TR3V107(1)010(3)0150	10.0	8	0.150	0.91
150	C	TR3C157M010(2)0500	15.0	20	0.500	0.47
150	D	TR3D157(1)010(2)0150	15.0	8	0.150	1.00
150	D	TR3D157(1)010(2)0100	15.0	8	0.100	1.22
150	D	TR3D157(1)010(2)0075	15.0	8	0.075	1.41
150	D	TR3D157(1)010(3)0070	15.0	8	0.070	1.46
150	D	TR3D157(1)010(3)0050	15.0	8	0.050	1.73
150	E	TR3E157(1)010(2)0100	15.0	8	0.100	1.28
150	E	TR3E157(1)010(2)0080	15.0	8	0.080	1.44
220	D	TR3D227(1)010(2)0150	22.0	8	0.150	1.00
220	D	TR3D227(1)010(2)0125	22.0	8	0.125	1.10
220	D	TR3D227(1)010(2)0100	22.0	8	0.100	1.22
220	D	TR3D227(1)010(3)0050	22.0	8	0.050	1.73
220	E	TR3E227(1)010(2)0150	22.0	8	0.150	1.05
220	E	TR3E227(1)010(2)0100	22.0	8	0.100	1.28
220	E	TR3E227(1)010(3)0070	22.0	8	0.070	1.54
220	E	TR3E227(1)010(3)0060	22.0	8	0.060	1.66
220	E	TR3E227(1)010(3)0050	22.0	8	0.050	1.82
220	V	TR3V227(1)010(3)0200	30.0	12	0.200	0.79
220	V	TR3V227(1)010(3)0150	30.0	12	0.150	0.91
330	D	TR3D337(1)010(2)0150	33.0	15	0.150	1.00
330	D	TR3D337(1)010(2)0125	33.0	15	0.125	1.10
330	D	TR3D337(1)010(2)0100	33.0	15	0.100	1.22
330	E	TR3E337(1)010(2)0100	33.0	10	0.100	1.28
330	E	TR3E337(1)010(3)0060	33.0	10	0.060	1.66
330	W	TR3W337(1)010(3)0100	33.0	10	0.100	1.58
330	W	TR3W337(1)010(3)0060	33.0	10	0.060	2.04
470	E	TR3E477(1)010(2)0200	47.0	15	0.200	0.91

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
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  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
10 V_{DC} AT + 85 °C; 7 V_{DC} AT 125 °C						
470	E	TR3E477(1)010(2)0150	47.0	15	0.150	1.05
470	E	TR3E477(1)010(2)0100	47.0	15	0.100	1.28
470	E	TR3E477(1)010(3)0075	47.0	15	0.075	1.48
470	W	TR3W477M010(3)0100	47.0	20	0.100	1.58
470	W	TR3W477M010(3)0060	47.0	20	0.060	2.04
470	W	TR3W477M010(3)0050	47.0	20	0.050	2.24
16 V_{DC} AT + 85 °C; 10 V_{DC} AT + 125 °C						
2.2	A	TR3A225(1)016(2)4000	0.5	6	4.000	0.14
2.2	A	TR3A225(1)016(2)3500	0.5	6	3.500	0.15
2.2	A	TR3A225(1)016(2)1800	0.5	6	1.800	0.20
3.3	A	TR3A335(1)016(2)4000	0.5	6	4.000	0.14
3.3	A	TR3A335(1)016(2)3500	0.5	6	3.500	0.15
4.7	A	TR3A475(1)016(2)3000	0.8	6	3.000	0.16
4.7	A	TR3A475(1)016(2)2500	0.8	6	2.500	0.17
4.7	A	TR3A475(1)016(2)2000	0.8	6	2.000	0.19
4.7	A	TR3A475(1)016(2)1500	0.8	6	1.500	0.22
4.7	B	TR3B475(1)016(2)1500	0.8	6	1.500	0.24
4.7	B	TR3B475(1)016(2)0800	0.8	6	0.800	0.33
6.8	A	TR3A685(1)016(2)3000	1.1	6	3.000	0.16
6.8	A	TR3A685(1)016(2)1500	1.1	6	1.500	0.22
6.8	B	TR3B685(1)016(2)1200	1.1	6	1.200	0.27
6.8	B	TR3B685(1)016(2)0600	1.1	6	0.600	0.38
10	A	TR3A106(1)016(2)1700	1.6	6	1.700	0.21
10	B	TR3B106(1)016(2)0800	1.6	6	0.800	0.33
10	B	TR3B106(1)016(2)0500	1.6	6	0.500	0.41
10	C	TR3C106(1)016(2)0600	1.6	6	0.600	0.43
10	C	TR3C106(1)016(2)0500	1.6	6	0.500	0.47
10	C	TR3C106(1)016(2)0450	1.6	6	0.450	0.49
15	B	TR3B156(1)016(2)0800	2.4	6	0.800	0.33
15	B	TR3B156(1)016(2)0500	2.4	6	0.500	0.41
15	C	TR3C156(1)016(2)0400	2.4	6	0.400	0.52
22	B	TR3B226(1)016(2)1000	3.5	6	1.000	0.29
22	B	TR3B226(1)016(2)0700	3.5	6	0.700	0.35
22	B	TR3B226(1)016(2)0600	3.5	6	0.600	0.38
22	B	TR3B226(1)016(2)0400	3.5	6	0.400	0.46
22	C	TR3C226(1)016(2)0375	3.5	6	0.375	0.54
22	C	TR3C226(1)016(2)0350	3.5	6	0.350	0.56
22	D	TR3D226(1)016(2)0250	3.5	6	0.250	0.77
33	B	TR3B336(1)016(2)0700	5.3	6	0.700	0.35
33	B	TR3B336(1)016(2)0500	5.3	6	0.500	0.41
33	B	TR3B336(1)016(2)0350	5.3	6	0.350	0.49
33	C	TR3C336(1)016(2)0300	5.3	6	0.300	0.61
33	C	TR3C336(1)016(2)0225	5.3	6	0.225	0.70
33	D	TR3D336(1)016(2)0250	5.3	6	0.250	0.77
33	D	TR3D336(1)016(2)0225	5.3	4	0.225	0.82
33	D	TR3D336(1)016(2)0150	5.3	6	0.150	1.00

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
16 V_{DC} AT + 85 °C; 10 V_{DC} AT + 125 °C						
47	C	TR3C476(1)016(2)0500	7.5	6	0.500	0.47
47	C	TR3C476(1)016(2)0350	7.5	6	0.350	0.56
47	C	TR3C476(1)016(2)0300	7.5	6	0.300	0.61
47	D	TR3D476(1)016(2)0200	7.5	6	0.200	0.87
47	D	TR3D476(1)016(2)0150	7.5	6	0.150	1.00
47	D	TR3D476(1)016(2)0100	7.5	6	0.100	1.22
68	D	TR3D686(1)016(2)0150	10.9	6	0.150	1.00
68	D	TR3D686(1)016(2)0100	10.9	6	0.100	1.22
68	D	TR3D686(1)016(3)0070	10.9	6	0.070	1.46
100	D	TR3D107(1)016(2)0150	16.0	8	0.150	1.00
100	D	TR3D107(1)016(2)0125	16.0	8	0.125	1.10
100	D	TR3D107(1)016(2)0100	16.0	8	0.100	1.22
100	D	TR3D107(1)016(3)0075	16.0	8	0.075	1.41
100	E	TR3E107(1)016(2)0150	16.0	8	0.150	1.05
100	E	TR3E107(1)016(2)0125	16.0	8	0.125	1.15
100	E	TR3E107(1)016(2)0100	16.0	8	0.100	1.28
150	D	TR3D157(1)016(2)0400	24.0	8	0.400	0.61
150	D	TR3D157(1)016(2)0150	24.0	8	0.150	1.00
150	D	TR3D157(1)016(2)0125	24.0	8	0.125	1.10
150	D	TR3D157(1)016(2)0100	24.0	8	0.100	1.22
150	D	TR3D157(1)016(2)0085	24.0	8	0.085	1.33
150	D	TR3D157(1)016(3)0075	24.0	8	0.075	1.41
150	D	TR3D157(1)016(3)0060	24.0	8	0.060	1.58
150	E	TR3E157(1)016(2)0400	24.0	8	0.400	0.64
150	E	TR3E157(1)016(2)0150	24.0	8	0.150	1.05
150	E	TR3E157(1)016(2)0100	24.0	8	0.100	1.28
150	E	TR3E157(1)016(2)0075	24.0	8	0.075	1.48
150	E	TR3E157(1)016(2)0060	24.0	8	0.060	1.66
220	E	TR3E227(1)016(2)0150	35.2	14	0.150	1.05
220	E	TR3E227(1)016(2)0125	35.2	14	0.125	1.15
220	E	TR3E227(1)016(2)0100	35.2	14	0.100	1.28
20 V_{DC} AT + 85 °C; 13 V_{DC} AT + 125 °C						
1.0	A	TR3A105(1)020(2)5500	0.5	4	5.500	0.12
1.0	A	TR3A105(1)020(2)3000	0.5	4	3.000	0.16
2.2	A	TR3A225(1)020(2)4000	0.5	6	4.000	0.14
2.2	A	TR3A225(1)020(2)3000	0.5	6	3.000	0.16
3.3	A	TR3A335(1)020(2)4000	0.7	6	4.000	0.14
3.3	B	TR3B335(1)020(2)1300	0.7	6	1.300	0.26
4.7	A	TR3A475(1)020(2)3500	0.9	6	3.500	0.15
4.7	A	TR3A475(1)020(2)1800	0.9	6	1.800	0.20
4.7	B	TR3B475(1)020(2)1000	0.9	6	1.000	0.29
4.7	B	TR3B475(1)020(2)0750	0.9	6	0.750	0.34
6.8	A	TR3A685(1)020(2)3200	1.4	6	3.200	0.15
6.8	A	TR3A685(1)020(2)3000	1.4	6	3.000	0.16
6.8	A	TR3A685(1)020(2)2600	1.4	6	2.600	0.17
6.8	B	TR3B685(1)020(2)1000	1.4	6	1.000	0.29
6.8	B	TR3B685(1)020(2)0600	1.4	6	0.600	0.38
10	B	TR3B106(1)020(2)1000	2.0	6	1.000	0.29
10	B	TR3B106(1)020(2)0500	2.0	6	0.500	0.41
10	C	TR3C106(1)020(2)0700	2.0	6	0.700	0.40

Notes

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  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
20 V_{DC} AT + 85 °C; 13 V_{DC} AT + 125 °C						
10	C	TR3C106(1)020(2)0500	2.0	6	0.500	0.47
10	C	TR3C106(1)020(2)0475	2.0	6	0.475	0.48
10	C	TR3C106(1)020(2)0450	2.0	6	0.450	0.49
10	C	TR3C106(1)020(2)0400	2.0	6	0.400	0.52
15	B	TR3B156(1)020(2)1000	3.0	6	1.000	0.29
15	B	TR3B156(1)020(2)0500	3.0	6	0.500	0.41
15	C	TR3C156(1)020(2)0400	3.0	6	0.400	0.52
22	B	TR3B226(1)020(2)0800	4.4	6	0.800	0.33
22	B	TR3B226(1)020(2)0600	4.4	6	0.600	0.38
22	B	TR3B226(1)020(2)0400	4.4	6	0.400	0.46
22	C	TR3C226(1)020(2)0400	4.4	6	0.400	0.52
22	C	TR3C226(1)020(2)0375	4.4	6	0.375	0.54
22	D	TR3D226(1)020(2)0300	4.4	6	0.300	0.71
22	D	TR3D226(1)020(2)0225	3.5	4	0.225	0.82
22	D	TR3D226(1)020(2)0200	4.4	6	0.200	0.87
33	C	TR3C336(1)020(2)0350	6.6	6	0.350	0.56
33	C	TR3C336(1)020(2)0300	6.6	6	0.300	0.61
33	C	TR3C336(1)020(2)0200	6.6	6	0.200	0.74
33	D	TR3C336(1)020(2)0400	6.6	6	0.400	0.61
33	D	TR3D336(1)020(2)0250	6.6	6	0.250	0.77
33	D	TR3D336(1)020(2)0200	6.6	6	0.200	0.87
47	D	TR3D476(1)020(2)0200	9.4	6	0.200	0.87
47	D	TR3D476(1)020(2)0175	9.4	6	0.175	0.93
47	D	TR3D476(1)020(2)0150	9.4	6	0.150	1.00
47	D	TR3D476(1)020(3)0100	9.4	6	0.100	1.22
47	E	TR3E476(1)020(2)0150	9.4	6	0.150	1.05
47	E	TR3E476(1)020(3)0125	9.4	6	0.125	1.15
68	D	TR3D686(1)020(2)0200	13.6	6	0.200	0.87
68	D	TR3D686(1)020(2)0175	13.6	6	0.175	0.93
68	D	TR3D686(1)020(2)0150	13.6	6	0.150	1.00
68	D	TR3D686(1)020(2)0115	13.6	6	0.115	1.14
68	E	TR3E686(1)020(2)0200	13.6	6	0.200	0.91
68	E	TR3E686(1)020(2)0150	13.6	6	0.150	1.05
68	E	TR3E686(1)020(2)0125	13.6	6	0.125	1.15
68	E	TR3E686(1)020(2)0120	13.6	6	0.120	1.17
100	D	TR3D107(1)020(2)0200	20.0	8	0.200	0.87
100	D	TR3D107(1)020(2)0150	20.0	8	0.150	1.00
100	D	TR3D107(1)020(2)0100	20.0	8	0.100	1.22
100	D	TR3D107(1)020(3)0085	20.0	8	0.085	1.33
100	D	TR3D107(1)020(3)0080	20.0	8	0.080	1.37
100	E	TR3E107(1)020(2)0200	20.0	8	0.200	0.91
100	E	TR3E107(1)020(2)0150	20.0	8	0.150	1.05
100	E	TR3E107(1)020(2)0100	20.0	8	0.100	1.28
100	W	TR3W107(1)020(3)0200	20.0	8	0.200	1.12
100	W	TR3W107(1)020(3)0100	20.0	8	0.100	1.58
100	W	TR3W107(1)020(3)0080	20.0	8	0.080	1.77
100	W	TR3W107(1)020(3)0060	20.0	8	0.060	2.04
150	W	TR3W157(1)020(3)0200	30.0	10	0.200	1.12
150	W	TR3W157(1)020(3)0150	30.0	10	0.150	1.29
150	W	TR3W157(1)020(3)0100	30.0	10	0.100	1.58
150	W	TR3W157(1)020(3)0080	30.0	10	0.080	1.77

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
25 V_{DC} AT + 85 °C; 17 V_{DC} AT + 125 °C						
1.0	A	TR3A105(1)025(2)4000	0.5	4	4.000	0.14
1.5	A	TR3A155(1)025(2)4000	0.5	6	4.000	0.14
1.5	A	TR3A155(1)025(2)3000	0.5	6	3.000	0.16
2.2	A	TR3A225(1)025(2)4000	0.6	6	4.000	0.14
2.2	B	TR3B225(1)025(2)1500	0.6	6	1.500	0.24
2.2	B	TR3B225(1)025(2)1200	0.6	6	1.200	0.27
2.2	B	TR3B225(1)025(2)0900	0.6	6	0.900	0.31
3.3	A	TR3A335(1)025(2)3500	0.8	6	3.500	0.15
3.3	A	TR3A335(1)025(2)3000	0.8	6	3.000	0.16
3.3	B	TR3B335(1)025(2)2000	0.8	6	2.000	0.21
3.3	B	TR3B335(1)025(2)1500	0.8	6	1.500	0.24
3.3	B	TR3B335(1)025(2)0750	0.8	6	0.750	0.34
4.7	A	TR3A475(1)025(2)3500	1.2	6	3.500	0.15
4.7	A	TR3A475(1)025(2)3000	1.2	6	3.000	0.16
4.7	B	TR3B475(1)025(2)1500	1.2	6	1.500	0.24
4.7	B	TR3B475(1)025(2)1000	1.2	6	1.000	0.29
4.7	B	TR3B475(1)025(2)0900	1.2	6	9.000	0.10
4.7	B	TR3B475(1)025(2)0700	1.2	6	0.700	0.35
4.7	C	TR3C475(1)025(2)0600	1.2	6	0.600	0.43
4.7	C	TR3C475(1)025(2)0525	1.2	6	0.525	0.46
6.8	B	TR3B685(1)025(2)2000	1.7	6	2.000	0.21
6.8	B	TR3B685(1)025(2)1500	1.7	6	1.500	0.24
6.8	B	TR3B685(1)025(2)1200	1.7	6	1.200	0.27
6.8	B	TR3B685(1)025(2)0700	1.7	6	0.700	0.35
6.8	B	TR3B685(1)025(3)0500	1.7	6	0.500	0.41
6.8	B	TR3B685(1)025(3)0400	1.7	6	0.400	0.46
6.8	C	TR3C685(1)025(2)0600	1.7	6	0.600	0.43
6.8	C	TR3C685(1)025(2)0500	1.7	6	0.500	0.47
10	B	TR3B106(1)025(2)1300	2.5	6	1.300	0.26
10	B	TR3B106(1)025(2)1100	2.5	6	1.100	0.28
10	B	TR3B106(1)025(2)0450	2.5	6	0.450	0.43
10	C	TR3C106(1)025(2)0600	2.5	6	0.600	0.43
10	C	TR3C106(1)025(2)0500	2.5	6	0.500	0.47
10	C	TR3C106(1)025(2)0450	2.5	6	0.450	0.49
10	C	TR3C106(1)025(2)0300	2.5	6	0.300	0.61
10	D	TR3D106(1)025(2)0400	2.5	6	0.400	0.61
10	D	TR3D106(1)025(2)0300	2.5	6	0.300	0.71
15	B	TR3B156(1)025(2)1000	3.8	6	1.000	0.29
15	B	TR3B156(1)025(2)0800	3.8	6	0.800	0.33
15	B	TR3B156(1)025(2)0600	3.8	6	0.600	0.38
15	C	TR3C156(1)025(2)0900	3.8	6	0.900	0.35
15	C	TR3C156(1)025(2)0425	3.8	6	0.425	0.51
15	D	TR3D156(1)025(2)0350	3.8	6	0.350	0.65
15	D	TR3D156(1)025(2)0275	3.8	6	0.275	0.74
15	D	TR3D156(1)025(2)0250	3.8	6	0.250	0.77
15	D	TR3D156(1)025(2)0200	3.8	6	0.200	0.87
22	C	TR3C226(1)025(2)1000	5.5	6	1.000	0.33

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
25 V_{DC} AT + 85 °C; 17 V_{DC} AT + 125 °C						
22	C	TR3C226(1)025(2)0900	5.5	6	0.900	0.35
22	C	TR3C226(1)025(2)0400	5.5	6	0.400	0.52
22	C	TR3C226(1)025(2)0425	5.5	6	0.425	0.51
22	C	TR3C226(1)025(2)0300	5.5	6	0.300	0.61
22	C	TR3C226(1)025(2)0275	5.5	6	0.275	0.63
22	C	TR3C226(1)025(2)0250	5.5	6	0.250	0.66
22	D	TR3D226(1)025(2)0300	5.5	6	0.300	0.71
22	D	TR3D226(1)025(2)0200	5.5	6	0.200	0.87
22	E	TR3E226(1)025(2)0300	5.5	6	0.300	0.74
22	E	TR3E226(1)025(2)0200	5.5	6	0.200	0.91
22	V	TR3V226(1)025(3)0500	5.5	6	0.500	0.50
22	V	TR3V226(1)025(3)0400	5.5	6	0.400	0.56
22	V	TR3V226(1)025(3)0250	5.5	6	0.250	0.71
33	D	TR3D336(1)025(2)0400	8.3	6	0.400	0.61
33	D	TR3D336(1)025(2)0300	8.3	6	0.300	0.71
33	D	TR3D336(1)025(2)0225	8.3	6	0.225	0.82
33	D	TR3D336(1)025(2)0200	8.3	6	0.200	0.87
33	E	TR3E336(1)025(2)0300	8.3	6	0.300	0.74
33	E	TR3E336(1)025(2)0200	8.3	6	0.200	0.91
33	E	TR3E336(1)025(2)0175	6.6	4	0.175	0.97
47	D	TR3D476(1)025(2)0350	11.8	8	0.350	0.65
47	D	TR3D476(1)025(2)0250	11.8	8	0.250	0.77
47	D	TR3D476(1)025(2)0200	11.8	8	0.200	0.87
47	D	TR3D476(1)025(2)0150	11.8	8	0.150	1.00
47	D	TR3D476(1)025(3)0125	11.8	8	0.125	1.10
47	D	TR3D476(1)025(3)0100	11.8	8	0.100	1.22
47	E	TR3E476(1)025(2)0300	11.8	6	0.300	0.74
47	E	TR3E476(1)025(2)0200	11.8	6	0.200	0.91
47	E	TR3E476(1)025(2)0150	11.8	8	0.150	1.05
47	E	TR3E476(1)025(3)0125	11.8	8	0.125	1.15
47	E	TR3E476(1)025(3)0100	11.8	8	0.100	1.28
68	E	TR3E686(1)025(2)0250	17.0	8	0.250	0.81
68	W	TR3W686(1)025(3)0200	17.0	6	0.200	1.12
68	W	TR3W686(1)025(3)0150	17.0	6	0.150	1.29
68	W	TR3W686(1)025(3)0095	17.0	6	0.095	1.62
100	W	TR3W107(1)025(3)0200	25.0	15	0.200	1.12
100	W	TR3W107(1)025(3)0150	25.0	15	0.150	1.29
100	W	TR3W107(1)025(3)0100	25.0	15	0.100	1.58
35 V_{DC} AT + 85 °C; 23 V_{DC} AT + 125 °C						
0.47	A	TR3A474(1)035(2)4000	0.5	4	4.000	0.14
0.68	A	TR3A684(1)035(2)6000	0.5	4	6.000	0.11
0.68	A	TR3A684(1)035(2)4000	0.5	4	4.000	0.14
1.0	A	TR3A105(1)035(2)6000	0.5	4	6.000	0.11
1.0	A	TR3A105(1)035(2)4000	0.5	4	4.000	0.14
1.0	A	TR3A105(1)035(2)3000	0.5	4	3.000	0.16
1.0	B	TR3B105(1)035(2)2000	0.5	4	2.000	0.21
1.0	B	TR3B105(1)035(2)1700	0.5	4	1.700	0.22
1.0	B	TR3B105(1)035(2)1500	0.5	4	1.500	0.24
1.5	B	TR3B155(1)035(2)3000	0.5	6	3.000	0.17
1.5	B	TR3B155(1)035(2)2000	0.5	6	2.000	0.21

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
35 V_{DC} AT + 85 °C; 23 V_{DC} AT + 125 °C						
1.5	C	TR3C155(1)035(2)2500	0.5	6	2.500	0.21
1.5	C	TR3C155(1)035(2)0900	0.5	6	0.900	0.35
2.2	B	TR3B225(1)035(2)2500	0.8	6	2.500	0.18
2.2	B	TR3B225(1)035(2)2000	0.8	6	2.000	0.21
2.2	B	TR3B225(1)035(2)1500	0.8	6	1.500	0.24
2.2	C	TR3C225(1)035(2)1500	0.8	6	1.500	0.27
2.2	C	TR3C225(1)035(2)0900	0.8	6	0.900	0.35
3.3	B	TR3B335(1)035(2)1500	1.2	6	1.500	0.24
3.3	B	TR3B335(1)035(2)1000	1.2	6	1.000	0.29
3.3	C	TR3C335(1)035(2)0800	1.2	6	0.800	0.37
3.3	C	TR3C335(1)035(2)0700	1.2	6	0.700	0.40
3.3	C	TR3C335(1)035(2)0600	1.2	6	0.600	0.43
4.7	B	TR3B475(1)035(2)1500	1.6	6	1.500	0.24
4.7	B	TR3B475(1)035(2)1000	1.6	6	1.000	0.29
4.7	B	TR3B475(1)035(2)0700	1.6	6	0.700	0.35
4.7	C	TR3C475(1)035(2)0700	1.6	6	0.700	0.40
4.7	C	TR3C475(1)035(2)0600	1.6	6	0.600	0.43
4.7	C	TR3C475(1)035(2)0500	1.6	6	0.500	0.47
4.7	D	TR3D475(1)035(2)0700	1.6	6	0.700	0.46
6.8	C	TR3C685(1)035(2)0900	2.4	6	0.900	0.35
6.8	C	TR3C685(1)035(2)0475	2.4	6	0.475	0.48
6.8	D	TR3D685(1)035(2)0500	2.4	6	0.500	0.55
6.8	D	TR3D685(1)035(2)0400	2.4	6	0.400	0.61
6.8	D	TR3D685(1)035(2)0300	2.4	6	0.300	0.71
6.8	E	TR3E685(1)035(2)0300	2.4	4	0.300	0.74
10	C	TR3C106(1)035(2)1200	3.5	6	1.200	0.30
10	C	TR3C106(1)035(2)0450	3.5	6	0.450	0.49
10	D	TR3D106(1)035(2)0400	3.5	6	0.400	0.61
10	D	TR3D106(1)035(2)0300	3.5	6	0.300	0.71
10	D	TR3D106(1)035(2)0260	3.5	6	0.260	0.76
10	D	TR3D106(1)035(2)0250	3.5	6	0.250	0.77
10	D	TR3D106(1)035(2)0200	3.5	6	0.200	0.87
10	D	TR3D106(1)035(3)0135	3.5	6	0.135	1.05
10	D	TR3D106(1)035(3)0125	3.5	6	0.125	1.10
10	E	TR3E106(1)035(2)0250	3.5	6	0.250	0.81
10	E	TR3E106(1)035(2)0200	3.5	6	0.200	0.91
15	D	TR3D156(1)035(2)0350	5.3	6	0.350	0.65
15	D	TR3D156(1)035(2)0300	5.3	6	0.300	0.71
15	D	TR3D156(1)035(2)0260	5.3	6	0.260	0.76
15	D	TR3D156(1)035(2)0225	5.3	6	0.225	0.82
15	D	TR3D156(1)035(2)0200	5.3	6	0.200	0.87
15	D	TR3D156(1)035(2)0150	5.3	6	0.150	1.00
15	E	TR3E156(1)035(2)0300	5.3	6	0.300	0.74
15	E	TR3E156(1)035(2)0225	5.3	6	0.225	0.86
15	E	TR3E156(1)035(2)0200	5.3	6	0.200	0.91
15	E	TR3E156(1)035(2)0150	5.3	6	0.150	1.05
22	D	TR3D226(1)035(2)0400	7.7	6	0.400	0.61
22	D	TR3D226(1)035(2)0300	7.7	6	0.300	0.71
22	D	TR3D226(1)035(2)0275	7.7	6	0.275	0.74
22	D	TR3D226(1)035(2)0250	7.7	6	0.250	0.77

Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

STANDARD RATINGS

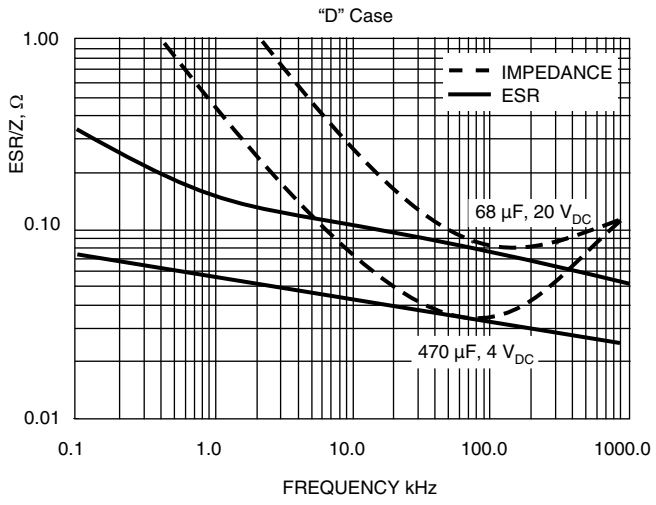
CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{RMS} (A)
35 V_{DC} AT + 85 °C; 23 V_{DC} AT + 125 °C						
22	D	TR3D226(1)035(2)0200	7.7	6	0.200	0.87
22	E	TR3E226(1)035(2)0300	7.7	6	0.300	0.74
22	E	TR3E226(1)035(2)0275	7.7	6	0.275	0.77
22	E	TR3E226(1)035(2)0260	7.7	6	0.260	0.80
22	E	TR3E226(1)035(2)0200	7.7	6	0.200	0.91
50 V_{DC} AT + 85 °C; 33 V_{DC} AT + 125 °C						
1.0	B	TR3B105(1)050(2)4000	0.5	4	4.000	0.15
1.0	B	TR3B105(1)050(2)2000	0.5	4	2.000	0.21
1.0	C	TR3C105(1)050(2)1600	0.5	4	1.600	0.26
1.5	B	TR3B155(1)050(2)2000	0.8	6	2.000	0.21
1.5	C	TR3C155(1)050(2)1500	0.8	6	1.500	0.27
2.2	B	TR3B225(1)050(2)2000	1.1	6	2.000	0.21
2.2	C	TR3C225(1)050(2)1500	1.1	6	1.500	0.27
2.2	D	TR3D225(1)050(2)0800	1.1	6	0.800	0.43
3.3	C	TR3C335(1)050(2)1500	1.7	6	1.500	0.27
3.3	D	TR3D335(1)050(2)0800	1.7	6	0.800	0.43
4.7	C	TR3C475(1)050(2)1000	2.4	6	1.000	0.33
4.7	C	TR3C475(1)050(2)0700	2.4	6	0.700	0.40
4.7	C	TR3C475(1)050(2)0500	2.4	6	0.500	0.47
4.7	D	TR3D475(1)050(2)0700	2.4	6	0.700	0.46
4.7	D	TR3D475(1)050(2)0600	2.4	6	0.600	0.50
4.7	D	TR3D475(1)050(2)0500	2.4	6	0.500	0.55
4.7	D	TR3D475(1)050(2)0300	2.4	6	0.300	0.71
4.7	E	TR3E475(1)050(2)0600	2.4	4	0.600	0.52
4.7	E	TR3E475(1)050(2)0300	2.4	4	0.300	0.74
6.8	D	TR3D685(1)050(2)0700	3.4	6	0.700	0.46
6.8	D	TR3D685(1)050(2)0600	3.4	6	0.600	0.50
6.8	D	TR3D685(1)050(2)0500	3.4	6	0.500	0.55
6.8	D	TR3D685(1)050(2)0300	3.4	6	0.300	0.71
6.8	E	TR3E685(1)050(2)0550	3.4	6	0.550	0.55
6.8	E	TR3E685(1)050(2)0500	3.4	6	0.500	0.57
10	D	TR3D106(1)050(2)0700	5.0	6	0.700	0.46
10	D	TR3D106(1)050(2)0550	5.0	6	0.550	0.52
10	D	TR3D106(1)050(2)0450	5.0	6	0.450	0.58
10	E	TR3E106(1)050(2)0700	5.0	6	0.700	0.49
10	E	TR3E106(1)050(2)0550	5.0	6	0.550	0.55
10	E	TR3E106(1)050(2)0500	5.0	6	0.500	0.57
10	E	TR3E106(1)050(2)0400	5.0	6	0.400	0.64
10	E	TR3E106(1)050(2)0300	5.0	6	0.300	0.74
15	E	TR3E156(1)050(2)0400	7.5	6	0.400	0.64
15	E	TR3E156(1)050(3)0300	7.5	6	0.300	0.74
63 V_{DC} AT + 85 °C; 40 V_{DC} AT + 125 °C						
4.7	D	TR3D475(1)063(2)0700	3.0	6	0.700	0.46
10	E	TR3E106(1)063(2)0600	6.3	6	0.600	0.52

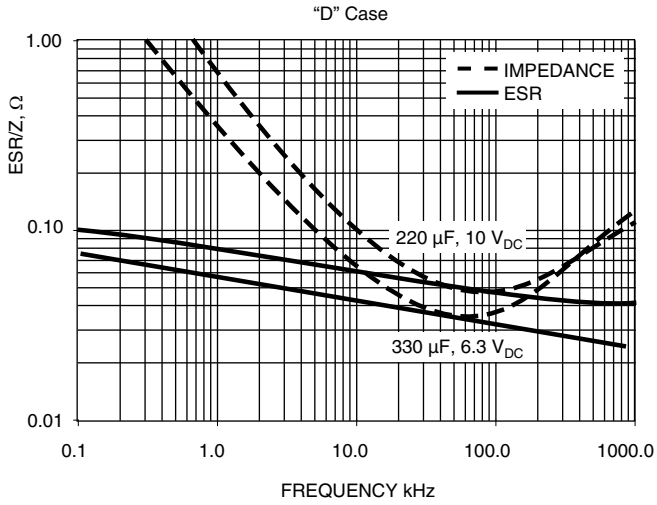
Notes

- Part number definitions:
  (1) Capacitance tolerance codes: K, M
  (2) Terminations and packaging codes: C, D, E, F
  (3) Lead (Pb)-free terminations and packaging codes: C, D

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	3.6
10	6.0
16	10
20	12
25	15
35	24
50	28
63	38
SEVERE CONDITIONS. FOR EXAMPLE: INPUT 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

TYPICAL CURVES AT + 25 °C, IMPEDANCE AND ESR VS. FREQUENCY





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
V	0.125
W	0.250

STANDARD PACKAGING QUANTITY		
CASE CODE	**UNITS PER REEL**	
	7" REEL	**13" REEL**
A	2000	9000
B	2000	8000
C	500	3000
D	500	2500
E	400	1500
V	1000	5000
W	500	2000

PRODUCT INFORMATION	
Guide for Molded Tantalum Capacitors	www.vishay.com/doc?40074
Pad Dimensions	
Packaging Dimensions	
Moisture Sensitivity	www.vishay.com/doc?40135
SELECTOR GUIDES	
Solid Tantalum Selector Guide	www.vishay.com/doc?49053
Solid Tantalum Chip Capacitors	www.vishay.com/doc?40091
FAQ	
Frequently Asked Questions	www.vishay.com/doc?40110

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