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



FEATURES

- Terminations: 100 % matte tin, standard tin/lead available
- Molded case available in six case codes
- Compatible with “High Volume” automatic pick and place equipment
- High Ripple Current carrying capability
- Low ESR
- Meets EIA 535BAAE and IEC Specification QC300801/US0001
- Compliant Terminations
- 100 % Surge Current Tested (B, C, D and E Case Sizes)

Pb-free Available

RoHS* COMPLIANT

PERFORMANCE/ELECTRICAL CHARACTERISTICS

Operating Temperature: - 55 °C to + 125 °C
Note: Refer to doc. 40088

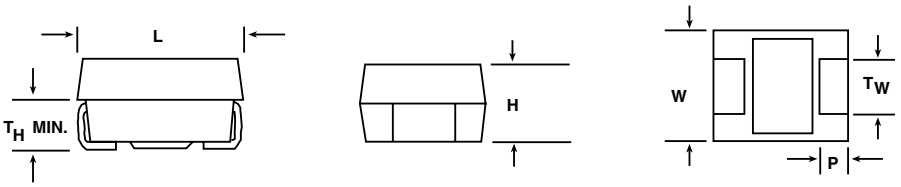
Capacitance Range: 0.47 µF to 1000 µF
Capacitance Tolerance: ± 10 %, ± 20 %
Voltage Rating: 4 VDC to 50 VDC

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.

Note:
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 data sheet limit after mounting.

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]	0.095 ± 0.004 [2.4 ± 0.10]	0.039 [1.0]
E	7343-43	0.287 ± 0.012 [7.3 ± 0.30]	0.170 ± 0.012 [4.3 ± 0.30]	0.158 ± 0.012 [4.0 ± 0.30]	0.051 ± 0.012 [1.3 ± 0.30]	0.095 ± 0.004 [2.4 ± 0.10]	0.039 [1.0]
V	7343-20	0.287 ± 0.012 [7.3 ± 0.30]	0.170 ± 0.012 [4.3 ± 0.30]	0.079 max. [2.0 max.]	0.051 ± 0.012 [1.3 ± 0.30]	0.095 ± 0.004 [2.4 ± 0.10]	0.039 [1.0]

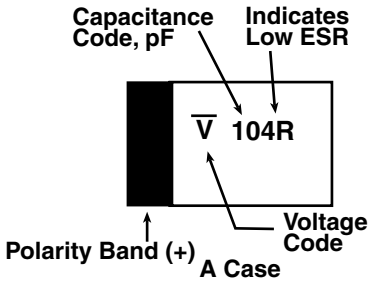
* Pb containing terminations are not RoHS compliant, exemptions may apply

RATINGS AND CASE CODES

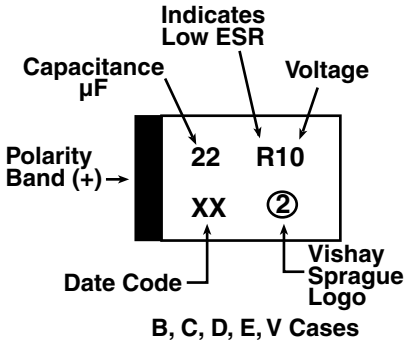
µF	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V	50 V
0.47							A	
0.68							A	
1.0					A	A	A/B	B/C
1.5						A	B/C	C
2.2			A	A	A	A/B	B/C	B/C/D
3.3				A	A	A/B	C	C/D
4.7			A	A/B	A/B	A/B/C	B/C	C/D/E
6.8			A	A	A/B	B/C	C/D	D/E
10		A	A/B	A/B/C	B/C	B/C/D	C/D	D/E
15	A	A	A/B	B/C	B/C	B/C/D	D/E	
22	A	A/B	A/B/C	B/C	B/C/D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

Note:
* Preliminary values, contact factory for availability.

MARKING



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



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.

RATINGS AND PART NUMBER REFERENCE

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 VDC at + 85 °C, 2.7 VDC 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	TR3A107(1)004(2)1000	10.0	30	1.000	0.27
100	A	TR3A107(1)004(2)0800	10.0	30	0.800	0.31
100	B	TR3B107(1)004(2)0450	4.0	6	0.450	0.43
100	C	TR3C107(1)004(2)0225	4.0	6	0.225	0.66
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	8	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(2)0150	8.8	8	0.150	1.00
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(2)0045	18.8	10	0.045	1.83
470	D	TR3D477(1)004(2)0035	18.8	10	0.035	2.07
470	E	TR3E477(1)004(2)0100	18.8	10	0.100	1.28
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 VDC at + 85 °C, 4 VDC 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	1.3	6	3.000	0.16
22	A	TR3A226(1)6R3(2)2000	1.3	6	2.000	0.19
22	A	TR3A226(1)6R3(2)1000	1.3	6	1.000	0.27
22	B	TR3B226(1)6R3(2)0600	1.3	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)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	2.8	12	0.800	0.31
47	B	TR3B476(1)6R3(2)0550	2.8	6	0.550	0.39
47	B	TR3B476(1)6R3(2)0500	2.8	6	0.500	0.41
47	B	TR3B476(1)6R3(2)0350	2.8	6	0.350	0.49
47	B	TR3B476(1)6R3(2)0250	2.8	6	0.250	0.58
47	C	TR3C476(1)6R3(2)0300	2.8	6	0.300	0.61
47	C	TR3C476(1)6R3(2)0250	2.8	6	0.250	0.66

Notes:

- (1) Capacitance Tolerance Codes: K, M
- (2) Terminations and Packaging Codes: C, D, E, F

* Preliminary values, contact factory for availability

RATINGS AND PART NUMBER REFERENCE

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 VDC at + 85 °C, 4 VDC at 125 °C						
68	B	TR3B686(1)6R3(2)0650	4.1	6	0.650	0.36
68	B	TR3B686(1)6R3(2)0550	4.1	6	0.550	0.39
68	B	TR3B686(1)6R3(2)0500	4.1	6	0.500	0.41
68	B	TR3B686(1)6R3(2)0350	4.1	6	0.350	0.49
68	B	TR3B686(1)6R3(2)0250	4.1	6	0.250	0.58
68	C	TR3C686(1)6R3(2)0275	4.1	6	0.275	0.63
68	C	TR3C686(1)6R3(2)0200	4.1	6	0.200	0.74
68	D	TR3D686(1)6R3(2)0200	4.1	6	0.200	0.87
68	D	TR3D686(1)6R3(2)0175	3.3	4	0.175	0.93
100	B	TR3B107(1)6R3(2)1500	6.0	15	1.500	0.24
100	B	TR3B107(1)6R3(2)0500	6.0	15	0.500	0.41
100	B	TR3B107(1)6R3(2)0400	6.0	15	0.400	0.46
100	C	TR3C107(1)6R3(2)0300	6.0	6	0.300	0.61
100	C	TR3C107(1)6R3(2)0250	6.0	6	0.250	0.66
100	C	TR3C107(1)6R3(2)0150	6.0	6	0.150	0.86
100	C	TR3C107(1)6R3(2)0125	6.0	6	0.125	0.94
100	D	TR3D107(1)6R3(2)0140	6.0	6	0.140	1.04
100	D	TR3D107(1)6R3(2)0150	6.0	6	0.150	1.00
100	V	TR3V107(1)6R3(2)0200	6.0	8	0.200	0.79
100	V	TR3V107(1)6R3(2)0150	6.0	8	0.150	0.91
150	C	TR3C157(1)6R3(2)0200	9.0	8	0.200	0.74
150	C	TR3C157(1)6R3(2)0300	9.0	8	0.300	0.61
150	D	TR3D157(1)6R3(2)0150	9.0	8	0.150	1.00
150	D	TR3D157(1)6R3(2)0125	9.0	8	0.125	1.10
150	D	TR3D157(1)6R3(2)0075	9.0	8	0.075	1.41
150	D	TR3D157(1)6R3(2)0070	9.0	8	0.070	1.46
150	D	TR3D157(1)6R3(2)0050	9.0	8	0.050	1.73
150	E	TR3E157(1)6R3(2)0100	9.0	8	0.100	1.28
220	C	TR3C227(1)6R3(2)0250	13.2	14	0.250	0.66
220	C	TR3C227(1)6R3(2)0225	13.2	14	0.225	0.70
220	D	TR3D227(1)6R3(2)0150	13.2	8	0.150	1.00
220	C	TR3C227(1)6R3(2)0300	13.2	14	0.300	0.61
220	E	TR3E227(1)6R3(2)0150	13.2	8	0.150	1.05
220	D	TR3D227(1)6R3(2)0100	13.2	8	0.100	1.22
220	D	TR3D227(1)6R3(2)0050	13.2	8	0.050	1.73
220	E	TR3E227(1)6R3(2)0100	13.2	8	0.100	1.28
330	D	TR3D337(1)6R3(2)0150	19.8	8	0.150	1.00
330	D	TR3D337(1)6R3(2)0125	19.8	8	0.125	1.10
330	D	TR3D337(1)6R3(2)0100	19.8	8	0.100	1.22
330	D	TR3D337(1)6R3(2)0060	19.8	8	0.060	1.58
330	D	TR3D337(1)6R3(2)0050	19.8	8	0.050	1.73
330	D	TR3D337(1)6R3(2)0045	19.8	8	0.045	1.83
330	D	TR3D337(1)6R3(2)0035	19.8	8	0.035	2.07
330	E	TR3E337(1)6R3(2)0150	19.8	8	0.150	1.05
330	E	TR3E337(1)6R3(2)0100	19.8	8	0.100	1.28
470	D	TR3D477M6R3(2)0200	28.2	14	0.200	0.87
470	D	TR3D477M6R3(2)0150	28.2	14	0.150	1.00
470*	D	TR3D477M6R3(2)0125	28.2	14	0.125	1.10
470*	D	TR3D477M6R3(2)0100	28.2	14	0.100	1.22
470	E	TR3E477(1)6R3(2)0100	28.2	10	0.100	1.28
470	E	TR3E477(1)6R3(2)0065	28.2	10	0.065	1.59
470	E	TR3E477(1)6R3(2)0060	28.2	10	0.060	1.66
470	E	TR3E477(1)6R3(2)0050	28.2	10	0.050	1.82
680	E	TR3E687(1)6R3(2)0100	40.8	20	0.100	1.28

Notes:

- (1) Capacitance Tolerance Codes: K, M
- (2) Terminations and Packaging Codes: C, D, E, F

* Preliminary values, contact factory for availability

RATINGS AND PART NUMBER REFERENCE

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 VDC at + 85 °C, 7 VDC at 125 °C						
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)3000	0.7	6	3.000	0.16
68	D	TR3D686(1)010(2)0200	6.8	6	0.200	0.87
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)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
15	A	TR3A156(1)010(2)1000	1.5	6	1.000	0.27
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)0700	2.2	6	0.700	0.35
22	B	TR3B226(1)010(2)0500	2.2	6	0.500	0.38
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
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	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)0650	4.7	6	0.650	0.36
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	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)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)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(2)0070	6.8	6	0.070	1.46
68	E	TR3E686(1)010(2)0150	5.4	4	0.150	1.05
68	V	TR3V686(1)010(2)0700	6.8	6	0.700	0.42
68	V	TR3V686(1)010(2)0300	6.8	6	0.300	0.65
68	V	TR3V686(1)010(2)0200	6.8	6	0.200	0.79
68	V	TR3V686(1)010(2)0140	6.8	6	0.140	0.94
68	V	TR3V686(1)010(2)0100	6.8	6	0.100	1.12

Notes:

- (1) Capacitance Tolerance Codes: K, M
- (2) Terminations and Packaging Codes: C, D, E, F

* Preliminary values, contact factory for availability

RATINGS AND PART NUMBER REFERENCE

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 VDC at + 85 °C, 7 VDC at 125 °C						
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(2)0065	10.0	6	0.065	1.52
100	D	TR3D107(1)010(2)0050	10.0	6	0.050	1.73
100	V	TR3V107(1)010(2)0400	10.0	8	0.400	0.56
100	V	TR3V107(1)010(2)0200	10.0	8	0.200	0.79
100	V	TR3V107(1)010(2)0150	10.0	8	0.150	0.91
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(2)0050	15.0	8	0.050	1.73
100	E	TR3E107(1)010(2)0150	10.0	6	0.150	1.28
150	D	TR3D157(1)010(2)0150	15.0	8	0.150	1.00
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(2)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
330	D	TR3D337M010(2)0150	33.0	15	0.150	1.00
330	D	TR3D337M010(2)0125	33.0	15	0.125	1.10
330	D	TR3D337M010(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(2)0060	33.0	10	0.060	1.66
470	E	TR3E477M010(2)0200	47.0	15	0.200	0.91
470	E	TR3E477M010(2)0150	47.0	15	0.150	1.05
470	E	TR3E477M010(2)0100	47.0	15	0.100	1.28
470*	E	TR3E477M010(2)0060	47.0	15	0.060	1.66
470*	E	TR3E477M010(2)0050	47.0	15	0.050	1.82
16 VDC at + 85 °C, 10 VDC at + 125 °C						
2.2	A	TR3A225(1)016(2)4000	0.5	6	4.000	0.14
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)2000	0.8	6	2.000	0.19
4.7	A	TR3A475(1)016(2)2500	0.8	6	2.500	0.17
4.7	B	TR3B475(1)016(2)1500	0.8	6	1.500	0.24
6.8	A	TR3A685(1)016(2)3000	1.1	6	3.000	0.16
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	C	TR3C106(1)016(2)0600	1.6	6	0.600	0.43
10	B	TR3B106(1)016(2)0500	1.6	6	0.500	0.41
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	C	TR3C156(1)016(2)0400	2.4	6	0.400	0.52

Notes:

- (1) Capacitance Tolerance Codes: K, M
- (2) Terminations and Packaging Codes: C, D, E, F

* Preliminary values, contact factory for availability

RATINGS AND PART NUMBER REFERENCE

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 VDC at + 85 °C, 10 VDC at + 125 °C						
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	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	0.17
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	D	TR3D336(1)016(2)0250	5.3	6	0.250	0.77
33	D	TR3D336(1)016(2)0225	4.2	4	0.225	0.82
33	D	TR3D336(1)016(2)0150	5.3	6	0.150	1.00
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(2)0070	10.9	6	0.070	1.46
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	E	TR3E107(1)016(2)0100	16.0	8	0.100	1.28
100	D	TR3D107(1)016(2)0150	16.0	8	0.150	1.00
100	E	TR3E107(1)016(2)0125	16.0	8	0.125	1.15
100	E	TR3E107(1)016(2)0150	16.0	8	0.150	1.05
150	E	TR3E157(1)016(2)0400	24.0	8	0.400	0.61
150	E	TR3E157(1)016(2)0060	24.0	8	0.060	1.66
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(2)0075	24.0	8	0.075	1.41
150	D	TR3D157(1)016(2)0060	24.0	8	0.060	1.58
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
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 VDC at + 85 °C, 13 VDC 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
3.3	A	TR3A335(1)020(2)4000	0.7	6	4.000	0.14
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
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

Notes:

- (1) Capacitance Tolerance Codes: K, M
- (2) Terminations and Packaging Codes: C, D, E, F

* Preliminary values, contact factory for availability

RATINGS AND PART NUMBER REFERENCE

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 VDC at + 85 °C, 13 VDC at + 125 °C						
10	B	TR3B106(1)020(2)1000	2.0	6	1.000	0.29
10	C	TR3C106(1)020(2)0700	2.0	6	0.700	0.40
10	C	TR3C106(1)020(2)0500	2.0	6	0.500	0.40
10	C	TR3C106(1)020(2)0475	2.0	6	0.475	0.47
10	C	TR3C106(1)020(2)0400	2.0	6	0.400	0.52
10	C	TR3C106(1)020(2)0450	2.0	6	0.450	0.49
15	B	TR3B156(1)020(2)1000	3.0	6	1.000	0.29
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	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
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	0.60
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	0.52
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(2)0100	9.4	6	0.100	1.22
47	E	TR3E476(1)020(2)0150	7.5	4	0.150	1.05
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
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
25 VDC at + 85 °C, 17 VDC 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
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
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
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	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(2)0500	1.7	6	0.500	0.41
6.8	B	TR3B685(1)025(2)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

Notes:

- (1) Capacitance Tolerance Codes: K, M
- (2) Terminations and Packaging Codes: C, D, E, F

* Preliminary values, contact factory for availability

RATINGS AND PART NUMBER REFERENCE

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 VDC at + 85 °C, 17 VDC at + 125 °C						
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
15	C	TR3C156(1)025(2)0900	3.8	6	0.900	0.35
15	C	TR3C156(1)025(2)0900	3.8	6	0.900	0.35
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
15	B	TR3B106(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)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
22	C	TR3C226(1)025(2)1000	5.5	6	1.000	0.33
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)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	V	TR3V226(1)025(2)0500	5.5	6	0.500	0.50
22	V	TR3V226(1)025(2)0400	5.5	6	0.400	0.56
22	V	TR3V226(1)025(2)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	6	0.200	0.87
47	D	TR3D476(1)025(2)0150	11.8	8	0.150	1.00
47	D	TR3D476(1)025(2)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
35 VDC at + 85 °C, 23 VDC 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)1500	0.5	4	1.500	0.24
1.0	B	TR3B105(1)035(2)1700	0.5	4	1.700	0.22

Notes:

- (1) Capacitance Tolerance Codes: K, M
- (2) Terminations and Packaging Codes: C, D, E, F

* Preliminary values, contact factory for availability

RATINGS AND PART NUMBER REFERENCE

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 VDC at + 85 °C, 23 VDC at + 125 °C						
1.5	B	TR3B155(1)035(2)3000	0.5	6	3.000	0.17
1.5	C	TR3C155(1)035(2)2500	0.5	6	2.500	0.21
1.5	B	TR3B155(1)035(2)2000	0.5	6	2.000	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	C	TR3C225(1)035(2)1500	0.8	6	1.500	0.27
2.2	B	TR3B225(1)035(2)2000	0.8	6	2.000	0.21
2.2	C	TR3C225(1)035(2)0900	0.8	6	0.900	0.35
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
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	1.9	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)0135	3.5	6	0.135	1.05
10	D	TR3D106(1)035(2)0125	3.5	6	0.125	1.10
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	0.87
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
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

Notes:

- (1) Capacitance Tolerance Codes: K, M
- (2) Terminations and Packaging Codes: C, D, E, F

* Preliminary values, contact factory for availability

RATINGS AND PART NUMBER REFERENCE

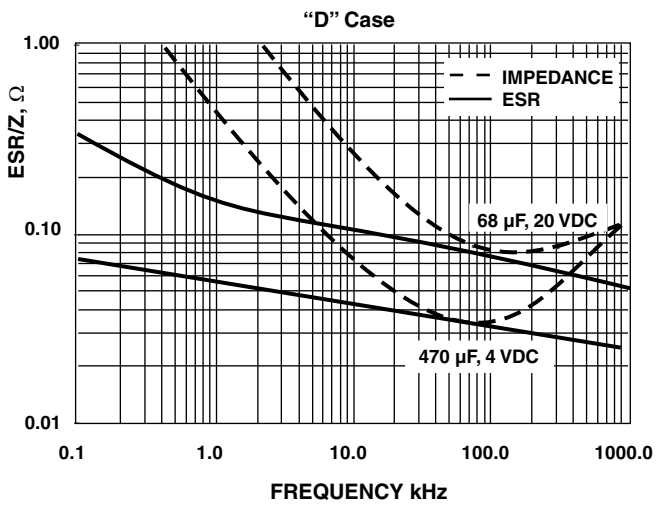
CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE at+ 25 °C (µA)	MAX. DF at+ 25 °C 120 Hz (%)	MAX. ESR at+ 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz I_{rms} (A)
50 VDC at + 85 °C, 33 VDC at + 125 °C						
1.0	B	TR3B105(1)050(2)4000	0.5	4	4.000	0.15
1.0	B	TR3B105(1)050(2)2000	0.5	4	2.000	0.21
1.0	C	TR3C105(1)050(2)1600	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)0300	1.9	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	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

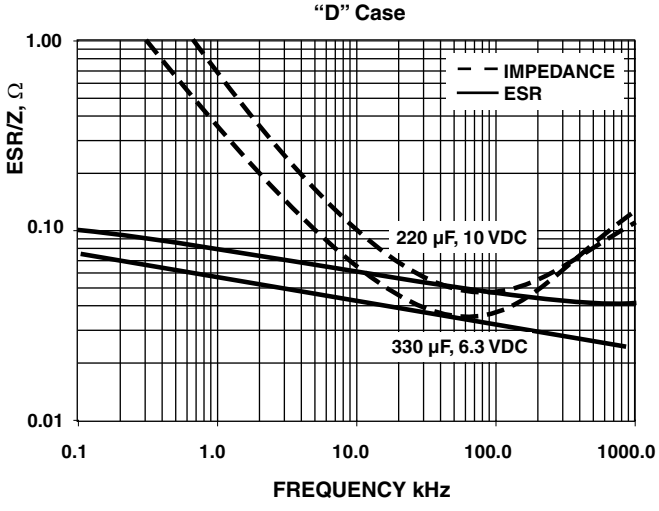
Notes:

- (1) Capacitance Tolerance Codes: K, M
- (2) Terminations and Packaging Codes: C, D, E, F

* Preliminary values, contact factory for availability

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





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