Low ESR Solid Tantalum Chip Capacitors
TANTAMOUNT® Molded Case, Built-In-Fuse

FEATURES

- Terminations: 100 % matte tin, standard, tin/lead available
- Molded case available in three case codes
- Compatible with “High Volume” automatic pick and place equipment
- High ripple current carrying capability
- Low ESR
- Meets EIA 535BAAC
- 100 % Surge current tested
- Compliant to RoHS directive 2002/95/EC

Pb-free Available

RoHS* COMPLIANT

PERFORMANCE/ELECTRICAL CHARACTERISTICS

Operating Temperature: - 55 °C to + 85 °C
(To + 125 °C with voltage derating)
Note: Refer to doc. 40088

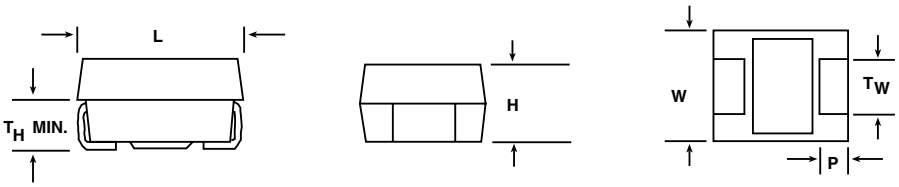
Capacitance Range: 0.47 µF to 470 µF
Capacitance Tolerance: ± 10 %, ± 20 %
Voltage Rating: 4 VDC to 50 VDC

ORDERING INFORMATION

TF3	E	477	M	004	E	0500
TYPE	CASE CODE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	TERMINATION/ 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) E = Tin/lead/7" (178 mm) reels F = Tin/lead/13" (330 mm)	Maximum 100 kHz ESR in mΩ

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.

DIMENSIONS in inches [millimeters]



CASE CODE	EIA SIZE	L	W	H	P	T_W	T_H (MIN.)
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]

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

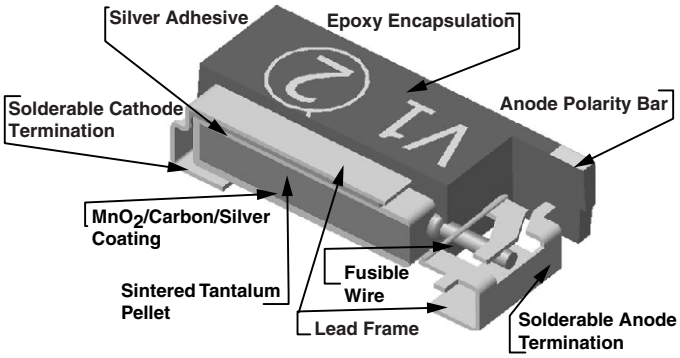
RATINGS AND CASE CODES

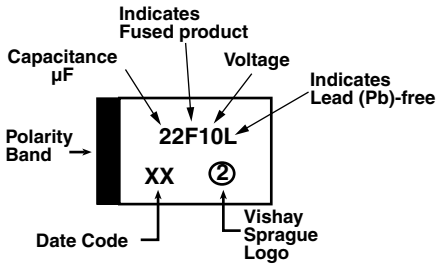
µF	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V	50 V
0.47								C
0.68								C
1.0								C
1.5							C	C
2.2						C	C	D
3.3						C	C	D
4.7					C	C	D	D/E
6.8				C	C	C	D	
10			C	C	C	C/D	D/E	
15		C	C	C	C/D	D	D/E	
22		C	C	C/D	D/E	D/E	E	
33		C/D	C/D	D	D/E			
47		C/D	C/D	D/E	D/E			
68	C	C/D	D/E	D				
100	C	D/E	D/E					
150	D	D/E	D/E					
220	D	D/E	D/E					
330	D(1)	E						
470	E							

Note

(1) Preliminary values, contact factory for availability.

CONSTRUCTION AND MARKING





C, D, E, Cases

Marking:

Capacitor marking includes an anode (+) polarity band, capacitance in microfarads and the voltage rating.

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.

RATINGS AND PART NUMBER REFERENCE

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120Hz (%)	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						
68	C	TF3C686(1)004(2)1600	2.7	6	1.600	0.26
68	C	TF3C686(1)004(2)1400	2.7	6	1.400	0.28
68	C	TF3C686(1)004(2)0400*	2.7	6	0.400	0.52
100	C	TF3C107(1)004(2)1200	4.0	8	1.200	0.30
100	C	TF3C107(1)004(2)0800	4.0	8	0.800	0.37
100	C	TF3C107(1)004(2)0400*	4.0	8	0.400	0.52
150	C	TF3C157(1)004(2)1200	6.0	8	1.200	0.30
150	C	TF3C157(1)004(2)0800	6.0	8	0.800	0.37
150	C	TF3C157(1)004(2)0400*	6.0	8	0.400	0.52
150	D	TF3D157(1)004(2)0800	6.0	8	0.800	0.43
150	D	TF3D157(1)004(2)0600	6.0	8	0.600	0.50
150	D	TF3D157(1)004(2)0300*	6.0	8	0.300	0.71
220	D	TF3D227(1)004(2)0700	8.8	8	0.700	0.46
220	D	TF3D227(1)004(2)0600	8.8	8	0.600	0.50
220	D	TF3D227(1)004(2)0400	8.8	8	0.400	0.61
220	D	TF3D227(1)004(2)0300*	8.8	8	0.300	0.71
330	D	TF3D337(1)004(2)0700*	13.2	15	0.700	0.46
330	D	TF3D337(1)004(2)0600*	13.2	15	0.600	0.50
330	D	TF3D337(1)004(2)0400*	13.2	15	0.400	0.61
330	D	TF3D337(1)004(2)0300*	13.2	15	0.300	0.71
330	E	TF3E337(1)004(2)0700	13.2	8	0.700	0.49
330	E	TF3E337(1)004(2)0500	13.2	8	0.500	0.57
330	E	TF3E337(1)004(2)0250*	13.2	8	0.250	0.81
470	E	TF3E477(1)004(2)0500	18.8	8	0.500	0.57
470	E	TF3E477(1)004(2)0250*	18.8	8	0.250	0.81
6.3 VDC AT + 85 °C, 4 VDC AT + 125 °C						
15	C	TF3C156(1)6R3(2)2000	0.9	6	2.000	0.23
15	C	TF3C156(1)6R3(2)1800	0.9	6	1.800	0.25
15	C	TF3C156(1)6R3(2)0600*	0.9	6	0.600	0.43
22	C	TF3C226(1)6R3(2)2000	1.1	6	2.000	0.23
22	C	TF3C226(1)6R3(2)1800	1.1	6	1.800	0.25
22	C	TF3C226(1)6R3(2)0600	1.1	6	0.600	0.43
33	C	TF3C336(1)6R3(2)2000	1.6	6	2.000	0.23
33	C	TF3C336(1)6R3(2)1400	1.6	6	1.400	0.28
33	C	TF3C336(1)6R3(2)0600*	1.6	6	0.600	0.43
47	C	TF3C476(1)6R3(2)1600	2.3	6	1.600	0.26
47	C	TF3C476(1)6R3(2)1300	2.3	6	1.300	0.29
47	C	TF3C476(1)6R3(2)0600*	2.3	6	0.600	0.43
47	D	TF3D476(1)6R3(2)1000	2.3	6	1.000	0.39
47	D	TF3D476(1)6R3(2)0900	2.3	6	0.900	0.41
47	D	TF3D476(1)6R3(2)0450	2.3	6	0.450	0.58
68	C	TF3C686(1)6R3(2)1200	3.3	6	1.200	0.30
68	C	TF3C686(1)6R3(2)0800	3.3	6	0.800	0.37
68	C	TF3C686(1)6R3(2)0400*	3.3	6	0.400	0.52
68	D	TF3D686(1)6R3(2)1000	3.3	6	1.000	0.39
68	D	TF3D686(1)6R3(2)0700	3.3	6	0.700	0.46
68	D	TF3D686(1)6R3(2)0350*	3.3	6	0.350	0.65

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 120Hz (%)	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						
100	C	TF3C107(1)6R3(2)0700	6.0	6	0.700	0.40
100	C	TF3C107(1)6R3(2)0400	6.0	6	0.400	0.52
100	C	TF3C107(1)6R3(2)0350*	6.0	6	0.350	0.56
100	D	TF3D107(1)6R3(2)0800	6.0	8	0.800	0.43
100	D	TF3D107(1)6R3(2)0700	6.0	8	0.700	0.46
100	D	TF3D107(1)6R3(2)0400	6.0	8	0.400	0.61
100	D	TF3D107(1)6R3(2)0350*	6.0	8	0.350	0.65
100	E	TF3E107(1)6R3(2)0900	6.0	8	0.900	0.43
100	E	TF3E107(1)6R3(2)0700	6.0	8	0.700	0.49
100	E	TF3E107(1)6R3(2)0300	6.0	8	0.300	0.74
150	D	TF3D157(1)6R3(2)0700	9.0	8	0.700	0.46
150	D	TF3D157(1)6R3(2)0600	9.0	8	0.600	0.50
150	D	TF3D157(1)6R3(2)0300	9.0	8	0.300	0.71
150	E	TF3E157(1)6R3(2)0600	9.0	8	0.600	0.52
150	E	TF3E157(1)6R3(2)0300	9.0	8	0.300	0.74
220	D	TF3D227(1)6R3(2)0700	13.2	8	0.700	0.46
220	D	TF3D227(1)6R3(2)0600	13.2	8	0.600	0.50
220	D	TF3D227(1)6R3(2)0300	13.2	8	0.300	0.71
220	E	TF3E227(1)6R3(2)0700	13.2	8	0.700	0.49
220	E	TF3E227(1)6R3(2)0500	13.2	8	0.500	0.57
220	E	TF3E227(1)6R3(2)0300	13.2	8	0.300	0.74
220	E	TF3E227(1)6R3(2)0250*	13.2	8	0.250	0.81
330	E	TF3E337(1)6R3(2)0500	19.8	8	0.500	0.57
330	E	TF3E337(1)6R3(2)0300	19.8	8	0.300	0.74
330	E	TF3E337(1)6R3(2)0250	19.8	8	0.250	0.81
10 VDC AT + 85 °C, 7 VDC AT + 125 °C						
10	C	TF3C106(1)010(2)2000	1.0	6	2.000	0.23
10	C	TF3C106(1)010(2)1800	1.0	6	1.800	0.25
10	C	TF3C106(1)010(2)0600*	1.0	6	0.600	0.43
15	C	TF3C156(1)010(2)2000	1.5	6	2.000	0.23
15	C	TF3C156(1)010(2)1800	1.5	6	1.800	0.25
15	C	TF3C156(1)010(2)0600*	1.5	6	0.600	0.43
22	C	TF3C226(1)010(2)2000	2.2	6	2.000	0.23
22	C	TF3C226(1)010(2)1400	2.2	6	1.400	0.28
22	C	TF3C226(1)010(2)0500	2.2	6	0.500	0.47
33	C	TF3C336(1)010(2)1600	3.3	6	1.600	0.26
33	C	TF3C336(1)010(2)1300	3.3	6	1.300	0.29
33	C	TF3C336(1)010(2)0400*	3.3	6	0.400	0.52
33	D	TF3D336(1)010(2)1000	3.3	6	1.000	0.39
33	D	TF3D336(1)010(2)0900	3.3	6	0.900	0.41
33	D	TF3D336(1)010(2)0400	3.3	6	0.400	0.61
47	C	TF3C476(1)010(2)1200	4.7	6	1.200	0.30
47	C	TF3C476(1)010(2)1000	4.7	6	1.000	0.33
47	C	TF3C476(1)010(2)0400*	4.7	6	0.400	0.52
47	D	TF3D476(1)010(2)1000	4.7	6	1.000	0.39
47	D	TF3D476(1)010(2)0700	4.7	6	0.700	0.46
47	D	TF3D476(1)010(2)0400	4.7	6	0.400	0.61
47	D	TF3D476(1)010(2)0350*	4.7	6	0.350	0.65

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 120Hz (%)	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						
68	D	TF3D686(1)010(2)0800	6.8	6	0.800	0.43
68	D	TF3D686(1)010(2)0700	6.8	6	0.700	0.46
68	D	TF3D686(1)010(2)0400	6.8	6	0.400	0.61
68	D	TF3D686(1)010(2)0350*	6.8	6	0.350	0.65
68	E	TF3E686(1)010(2)0900	6.8	6	0.900	0.43
68	E	TF3E686(1)010(2)0700	6.8	6	0.700	0.49
68	E	TF3E686(1)010(2)0350	6.8	6	0.350	0.69
100	D	TF3D107(1)010(2)0700	10.0	8	0.700	0.46
100	D	TF3D107(1)010(2)0600	10.0	8	0.600	0.50
100	D	TF3D107(1)010(2)0400	10.0	8	0.400	0.61
100	D	TF3D107(1)010(2)0300*	10.0	8	0.300	0.71
100	E	TF3E107(1)010(2)0600	10.0	8	0.600	0.52
100	E	TF3E107(1)010(2)0400	10.0	8	0.400	0.64
100	E	TF3E107(1)010(2)0300	10.0	8	0.300	0.74
150	D	TF3D157(1)010(2)0700	15.0	8	0.700	0.46
150	D	TF3D157(1)010(2)0600	15.0	8	0.600	0.50
150	D	TF3D157(1)010(2)0400	15.0	8	0.400	0.61
150	D	TF3D157(1)010(2)0300*	15.0	8	0.300	0.71
150	E	TF3E157(1)010(2)0700	15.0	8	0.700	0.49
150	E	TF3E157(1)010(2)0500	15.0	8	0.500	0.57
150	E	TF3E157(1)010(2)0400	15.0	8	0.400	0.64
150	E	TF3E157(1)010(2)0250*	15.0	8	0.250	0.81
220	D	TF3D227(1)010(2)0600*	22.0	8	0.600	0.50
220	D	TF3D227(1)010(2)0300*	22.0	8	0.300	0.71
220	E	TF3E227(1)010(2)0500	22.0	8	0.500	0.57
220	E	TF3E227(1)010(2)0300	22.0	8	0.300	0.74
220	E	TF3E227(1)010(2)0250*	22.0	8	0.250	0.81
16 VDC AT + 85 °C, 10 VDC AT + 125 °C						
6.8	C	TF3C685(1)016(2)2000	1.1	6	2.000	0.23
6.8	C	TF3C106(1)016(2)0600	1.1	6	0.600	0.43
10	C	TF3C106(1)016(2)2000	1.6	6	2.000	0.23
10	C	TF3C106(1)016(2)1800	1.6	6	1.800	0.25
10	C	TF3C106(1)016(2)0700	1.6	6	0.700	0.40
10	C	TF3C106(1)016(2)0600	1.6	6	0.600	0.43
15	C	TF3C156(1)016(2)2000	2.4	6	2.000	0.23
15	C	TF3C156(1)016(2)1400	2.4	6	1.400	0.28
15	C	TF3C156(1)016(2)0600*	2.4	6	0.600	0.43
22	C	TF3C226(1)016(2)1600	3.5	6	1.600	0.26
22	C	TF3C226(1)016(2)1300	3.5	6	1.300	0.29
22	C	TF3C226(1)016(2)1000	3.5	6	1.000	0.33
22	C	TF3C226(1)016(2)0700*	3.5	6	0.700	0.40
22	D	TF3D226(1)016(2)1000	3.5	6	1.000	0.39
22	D	TF3D226(1)016(2)0900	3.5	6	0.900	0.41
22	D	TF3D226(1)016(2)0500	3.5	6	0.500	0.55
22	D	TF3D226(1)016(2)0450*	3.5	6	0.450	0.58
33	C	TF3C336(1)016(2)1000	5.3	6	1.000	0.33
33	C	TF3C336(1)016(2)0500	5.3	6	0.500	0.47
33	D	TF3D336(1)016(2)1000	5.3	6	1.000	0.39
33	D	TF3D336(1)016(2)0700	5.3	6	0.700	0.46
33	D	TF3D336(1)016(2)0400	5.3	6	0.400	0.61
33	D	TF3D336(1)016(2)0350*	5.3	6	0.350	0.65

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 120Hz (%)	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						
47	D	TF3D476(1)016(2)0800	7.5	6	0.800	0.43
47	D	TF3D476(1)016(2)0700	7.5	6	0.700	0.46
47	D	TF3D476(1)016(2)0400	7.5	6	0.400	0.61
47	D	TF3D476(1)016(2)0350	7.5	6	0.350	0.65
47	E	TF3E476(1)016(2)0900	7.5	6	0.900	0.43
47	E	TF3E476(1)016(2)0700	7.5	6	0.700	0.49
47	E	TF3E476(1)016(2)0400	7.5	6	0.400	0.64
47	E	TF3E476(1)016(2)0350	7.5	6	0.350	0.69
68	D	TF3D686(1)016(2)0600	10.9	6	0.600	0.50
68	D	TF3D686(1)016(2)0300	10.9	6	0.300	0.71
100	E	TF3E107(1)016(2)0700	16.0	8	0.700	0.49
100	E	TF3E107(1)016(2)0600	16.0	8	0.600	0.52
100	E	TF3E107(1)016(2)0300*	16.0	8	0.300	0.74
20 VDC AT + 85 °C, 13 VDC AT + 125 °C						
4.7	C	TF3C475(1)020(2)2000	0.9	6	2.000	0.23
4.7	C	TF3C475(1)020(2)1000*	0.9	6	1.000	0.33
6.8	C	TF3C685(1)020(2)2000	1.1	6	2.000	0.23
6.8	C	TF3C685(1)020(2)1900	1.1	6	1.900	0.24
6.8	C	TF3C106(1)020(2)0600	1.1	6	0.600	0.43
10	C	TF3C106(1)020(2)2000	2.0	6	2.000	0.23
10	C	TF3C106(1)020(2)1600	2.0	6	1.600	0.26
10	C	TF3C106(1)020(2)0800	2.0	6	0.800	0.37
15	C	TF3C156(1)020(2)1400	3.0	6	1.400	0.28
15	C	TF3D156(1)020(2)0500*	3.0	6	0.500	0.47
15	D	TF3C156(1)020(2)1000	3.0	6	1.000	0.39
15	D	TF3C156(1)020(2)0900	3.0	6	0.900	0.41
15	D	TF3C156(1)020(2)0500	3.0	6	0.500	0.55
15	D	TF3C156(1)020(2)0450*	3.0	6	0.450	0.58
22	D	TF3D226(1)020(2)1000	4.4	6	1.000	0.39
22	D	TF3D226(1)020(2)0700	4.4	6	0.700	0.46
22	D	TF3D226(1)020(2)0500	4.4	6	0.500	0.55
22	D	TF3D226(1)020(2)0350	4.4	6	0.350	0.65
33	D	TF3D336(1)020(2)0700	6.6	6	0.700	0.46
33	D	TF3D336(1)020(2)0400	6.6	6	0.400	0.61
33	D	TF3D336(1)020(2)0350	6.6	6	0.350	0.65
33	E	TF3E336(1)020(2)0900	6.6	6	0.900	0.43
33	E	TF3E336(1)020(2)0700	6.6	6	0.700	0.49
33	E	TF3E336(1)020(2)0400	6.6	6	0.400	0.64
33	E	TF3E336(1)020(2)0350	6.6	6	0.350	0.69
47	D	TF3D476(1)020(2)0600	9.4	6	0.600	0.50
47	D	TF3D476(1)020(2)0300	9.4	6	0.300	0.71
47	E	TF3E476(1)020(2)0600	9.4	6	0.600	0.52
47	E	TF3E476(1)020(2)0300	9.4	6	0.300	0.74
68	E	TF3E686(1)020(2)0600	13.6	6	0.600	0.52
68	E	TF3E686(1)020(2)0300*	13.6	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

RATINGS AND PART NUMBER REFERENCE

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120Hz (%)	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						
2.2	C	TF3C225(1)025(2)3500	0.9	6	3.500	0.18
2.2	C	TF3C225(1)025(2)2800	0.9	6	2.800	0.20
2.2	C	TF3C225(1)025(2)1400*	0.9	6	1.400	0.28
3.3	C	TF3C335(1)025(2)2500	0.9	6	2.500	0.21
3.3	C	TF3C335(1)025(2)2300	0.9	6	2.300	0.22
3.3	C	TF3C335(1)025(2)2100	0.9	6	2.100	0.23
3.3	C	TF3C335(1)025(2)1200*	0.9	6	1.200	0.30
4.7	C	TF3C475(1)025(2)2500	1.2	6	2.500	0.21
4.7	C	TF3C475(1)025(2)1900	1.2	6	1.900	0.24
4.7	C	TF3C475(1)025(2)1300	1.2	6	1.300	0.29
4.7	C	TF3C475(1)025(2)1000	1.2	6	1.000	0.33
6.8	C	TF3C685(1)025(2)2000	1.7	6	2.000	0.23
6.8	C	TF3C685(1)025(2)1600	1.7	6	1.600	0.26
6.8	C	TF3C685(1)025(2)0600	1.7	6	0.600	0.43
10	C	TF3C106(1)025(2)1400	2.5	6	1.400	0.28
10	C	TF3C106(1)025(2)0600	2.5	6	0.600	0.43
10	D	TF3D106(1)025(2)1200	2.5	6	1.200	0.35
10	D	TF3D106(1)025(2)1000	2.5	6	1.000	0.39
10	D	TF3D106(1)025(2)0600	2.5	6	0.600	0.50
10	D	TF3D106(1)025(2)0500	2.5	6	0.500	0.55
15	C	TF3C156(1)025(2)1200	3.8	6	1.200	0.30
15	C	TF3C156(1)025(2)0800	3.8	6	0.800	0.37
15	C	TF3C156(1)025(2)0600*	3.8	6	0.600	0.43
15	D	TF3D156(1)025(2)1000	3.8	6	1.000	0.39
15	D	TF3D156(1)025(2)0800	3.8	6	0.800	0.43
15	D	TF3D156(1)025(2)0500	3.8	6	0.500	0.55
15	D	TF3D156(1)025(2)0400	3.8	6	0.400	0.61
22	D	TF3D226(1)025(2)0800	5.5	6	0.800	0.43
22	D	TF3D226(1)025(2)0700	5.5	6	0.700	0.46
22	D	TF3D226(1)025(2)0400	5.5	6	0.400	0.61
22	D	TF3D226(1)025(2)0350*	5.5	6	0.350	0.65
22	E	TF3E226(1)025(2)0900	5.5	6	0.900	0.43
22	E	TF3E226(1)025(2)0700	5.5	6	0.700	0.49
22	E	TF3E226(1)025(2)0400	5.5	6	0.400	0.64
22	E	TF3E226(1)025(2)0350*	5.5	6	0.350	0.69
33	E	TF3E336(1)025(2)0600	8.3	6	0.600	0.52
33	E	TF3E336(1)025(2)0300	6.6	4	0.300	0.74
35 VDC AT + 85 °C, 23 VDC AT + 125 °C						
1.5	C	TF3C155(1)035(2)4500	0.5	6	4.500	0.16
1.5	C	TF3C155(1)035(2)3800	0.5	6	3.800	0.17
1.5	C	TF3C155(1)035(2)2600	0.5	6	2.600	0.21
1.5	C	TF3C155(1)035(2)1900*	0.5	6	1.900	0.24
2.2	C	TF3C225(1)035(2)3500	0.8	6	3.500	0.18
2.2	C	TF3C225(1)035(2)2900	0.8	6	2.900	0.19
2.2	C	TF3C225(1)035(2)1600	0.8	6	1.600	0.26
2.2	C	TF3C225(1)035(2)1500*	0.8	6	1.500	0.27

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 120Hz (%)	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						
3.3	C	TF3C335(1)035(2)2500	1.2	6	2.500	0.21
3.3	C	TF3C335(1)035(2)2000	1.2	6	2.000	0.23
3.3	C	TF3C335(1)035(2)0900*	1.2	6	0.900	0.35
4.7	C	TF3C475(1)035(2)1800	1.6	6	1.800	0.25
4.7	C	TF3C475(1)035(2)0900*	1.6	6	0.900	0.35
4.7	D	TF3D475(1)035(2)1500	1.6	6	1.500	0.32
4.7	D	TF3D475(1)035(2)1200	1.6	6	1.200	0.35
4.7	D	TF3D475(1)035(2)0700	1.6	6	0.700	0.46
4.7	D	TF3D475(1)035(2)0600*	1.6	6	0.600	0.50
6.8	D	TF3D685(1)035(2)1300	2.4	6	1.300	0.34
6.8	D	TF3D685(1)035(2)1000	2.4	6	1.000	0.39
6.8	D	TF3D685(1)035(2)0750	2.4	6	0.750	0.45
6.8	D	TF3D685(1)035(2)0500	2.4	6	0.500	0.55
10	D	TF3D106(1)035(2)0800	3.5	6	0.800	0.43
10	D	TF3D106(1)035(2)0500	3.5	6	0.500	0.55
10	D	TF3D106(1)035(2)0400*	3.5	6	0.400	0.61
10	E	TF3E106(1)035(2)1000	3.5	6	1.000	0.41
10	E	TF3E106(1)035(2)0800	3.5	6	0.800	0.45
10	E	TF3E106(1)035(2)0500	3.5	6	0.500	0.57
10	E	TF3E106(1)035(2)0400*	3.5	6	0.400	0.64
15	D	TF3D156(1)035(2)0800	5.3	6	0.800	0.43
15	D	TF3D156(1)035(2)0500	5.3	6	0.500	0.55
15	D	TF3D156(1)035(2)0400*	5.3	6	0.400	0.61
15	E	TF3E156(1)035(2)0900	5.3	6	0.900	0.43
15	E	TF3E156(1)035(2)0700	5.3	6	0.700	0.49
15	E	TF3E156(1)035(2)0500	5.3	6	0.500	0.57
15	E	TF3E156(1)035(2)0350*	5.3	6	0.350	0.69
22	E	TF3E226(1)035(2)0600	7.7	6	0.600	0.52
22	E	TF3E226(1)035(2)0300*	7.7	6	0.300	0.74
50 VDC AT + 85 °C, 33 VDC AT + 125 °C						
0.47	C	TF3C474(1)050(2)8000	0.5	4	8.000	0.12
0.47	C	TF3C474(1)050(2)6700	0.5	4	6.700	0.13
0.47	C	TF3C474(1)050(2)1900*	0.5	4	1.900	0.24
0.68	C	TF3C684(1)050(2)7000	0.5	4	7.000	0.13
0.68	C	TF3C684(1)050(2)5900	0.5	4	5.900	0.14
0.68	C	TF3C684(1)050(2)1700*	0.5	4	1.700	0.25
1	C	TF3C105(1)050(2)5500	0.5	4	5.500	0.14
1	C	TF3C105(1)050(2)4400	0.5	4	4.400	0.16
1	C	TF3C105(1)050(2)2700	0.5	4	2.700	0.20
1	C	TF3C105(1)050(2)2200*	0.5	4	2.200	0.22
1.5	C	TF3C155(1)050(2)5000	0.8	6	5.000	0.15
1.5	C	TF3C155(1)050(2)3200	0.8	6	3.200	0.19
1.5	C	TF3C155(1)050(2)2000	0.8	6	2.000	0.23
1.5	C	TF3C155(1)050(2)1600*	0.8	6	1.600	0.26
2.2	C	TF3C225(1)050(2)2800	1.1	6	2.800	0.20
2.2	C	TF3C225(1)050(2)1400*	1.1	6	1.400	0.28
2.2	D	TF3D225(1)050(2)2500	1.1	6	2.500	0.24
2.2	D	TF3D225(1)050(2)2100	1.1	6	2.100	0.27
2.2	D	TF3D225(1)050(2)0900*	1.1	6	0.900	0.41

Notes
(1) Capacitance tolerance codes: K, M
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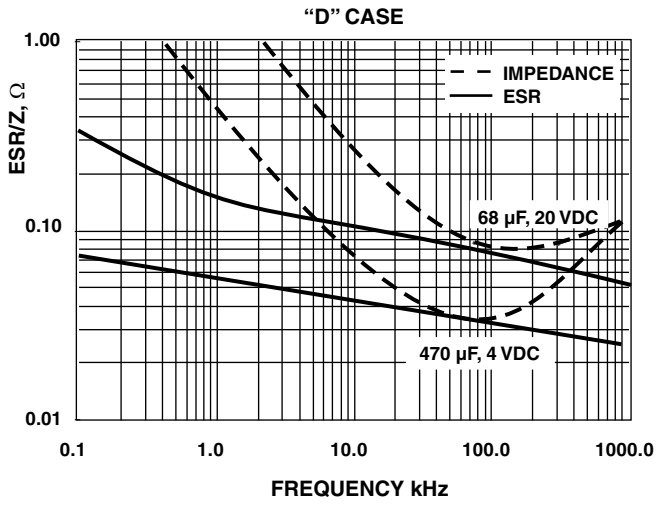
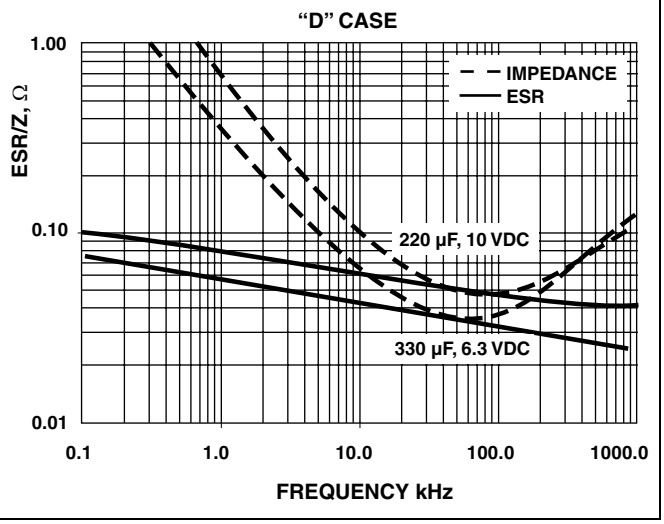
RATINGS AND PART NUMBER REFERENCE

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120Hz (%)	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						
3.3	C	TF3C335(1)050(2)2400	1.7	6	2.400	0.21
3.3	C	TF3C335(1)050(2)1200*	1.7	6	1.200	0.30
3.3	D	TF3D335(1)050(2)2000	1.7	6	2.000	0.27
3.3	D	TF3D335(1)050(2)1600	1.7	6	1.600	0.31
3.3	D	TF3D335(1)050(2)1000	1.7	6	1.000	0.39
3.3	D	TF3D335(1)050(2)0800*	1.7	6	0.800	0.43
4.7	D	TF3D475(1)050(2)1100	2.4	6	1.100	0.37
4.7	D	TF3D475(1)050(2)0400*	2.4	6	0.400	0.61
4.7	E	TF3E475(1)050(2)1500	1.9	4	1.500	0.33
4.7	E	TF3E475(1)050(2)1100	1.9	4	1.100	0.39
4.7	E	TF3E475(1)050(2)0400*	1.9	4	0.400	0.64
6.8	D	TF3D685(1)050(2)0900	3.4	6	0.900	0.41
6.8	D	TF3D685(1)050(2)0450*	3.4	6	0.450	0.58
6.8	E	TF3E685(1)050(2)0900	3.4	6	0.900	0.43
6.8	E	TF3E685(1)050(2)0450*	3.4	6	0.450	0.61

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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