

FEATURES

- Low impedance for high frequency, Anti-Solvent design.
- Long life 2000 ~ 5000 hours @ 105°C depending on case size.
- Radial type for switching power supplies.

PART NUMBERING

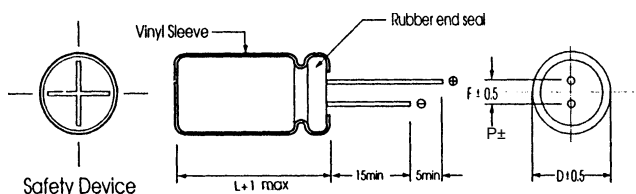
Part Number Example: TRC-050/100M5X11F							
TRC	-	050	/	100	M	5X11	F
Type		Rated DC Voltage		Capacitance Code (μF)*	Tolerance Code	Size	RoHs Compliant

* Capacitance Code: First two digits represent significant figures, third digit represents multiplier (number of zeros).

SPECIFICATIONS

Performance Characteristics								
Operating Temperature Range	-55°C ~ +105°C.							
Voltage Range	6.3VDC ~ 63VDC.							
Capacitance Range	0.47μF ~ 4700μF.							
Capacitance Tolerance (20°C, 120Hz)	±20%.							
Maximum Dissipation Factor (20°C, 120Hz)	Rated Voltage (WVDC)	6.3	10	16	25	35	50	63
	DF %	15	12	11	9	8	6	5
	For capacitance >1000μF, add 2% per another 1000μF.							
Maximum Leakage Current (20°C) (after 1 minute)	0.01CV or 2μA, whichever is greater.							
Load Life Test	Test Conditions							
	Duration Time	5000 hours (2000 hours for dØ - 8mm).						
	Ambient Temperature	105°C.						
	Applied Voltage	Rate DC working voltage.						
	After test requirements @ 20°C							
	Capacitance Change	Within ±20% of the initial measured value.						
	Dissipation Factor	150% of the initial specified value.						
	Leakage Current	The initial specified value.						
Shelf Life	Test Conditions							
	Duration Time	500 hours.						
	Ambient Temperature	105°C.						
	Applied Voltage	None.						
	After test requirements @ 20°C same limits as load life.							
	Pre-treatment for measurements shall be conducted after applications of DC working voltage for 30 minutes.							

DIMENSIONS



DIMENSIONS (UNIT: mm)

D	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
dØ	0.5	0.5	0.6	0.6	0.6	0.8	0.8

CASE SIZE OF STANDARD PRODUCTS (DØXL (mm))

Cap. (µF)	WVDC (SV)						
	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)
0.47						5 x 11	5 x 11
1						5 x 11	5 x 11
2.2						5 x 11	5 x 11
3.3						5 x 11	5 x 11
4.7						5 x 11	5 x 11
10			5 x 11	5 x 11	5 x 11	5 x 11	5 x 11
22		5 x 11	5 x 11	5 x 11	6.3 x 11	6.3 x 11	6.3 x 11
33		5 x 11	5 x 11	6.3 x 11	6.3 x 11	6.3 x 11	8 x 12
47		5 x 11	6.3 x 11	6.3 x 11	6.3 x 11	8 x 12	8 x 12
100	5 x 11	6.3 x 11	6.3 x 11	8 x 12	8 x 12	8 x 20	10 x 20
220	6.3 x 11	8 x 12	8 x 12	8 x 15	10 x 17	10 x 25	13 x 21
330	8 x 12	8 x 12	8 x 16	10 x 17	10 x 20	10 x 30	13 x 25
470	8 x 12	8 x 16	10 x 17	10 x 20	10 x 30	13 x 25	16 x 25.5
1000	10 x 17	10 x 20	10 x 30	13 x 25	13 x 30	16 x 31.5	16 x 41
2200	13 x 21	13 x 25	13 x 30	13 x 40	16 x 35	18 x 41	
3300	13 x 30	13 x 35	13 x 40	16 x 35			
4700	16 x 25.5	16 x 31.5	16 x 35	18 x 41			

MAXIMUM RIPPLE ((mA) 105°C, 100KHz)

Cap. (µF)	WVDC (SV)						
	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)
0.47						15	16
1						25	27
2.2						33	38
3.3						45	48
4.7						58	62
10			37	56	70	100	105
22		55	70	120	130	135	150
33		58	130	150	175	230	265
47		120	190	230	250	285	351
100	185	225	260	300	390	475	630
220	300	390	470	550	740	810	870
330	390	445	555	740	935	990	1100
470	435	555	528	1040	1050	1490	1430
1000	625	1040	1180	1430	1650	1880	2110
2200	1300	1690	1950	2390	2550	2620	
3300	1425	1870	2110	2550			
4700	1880	2100	2550	2620			

MAXIMUM IMPEDANCE ((Ω) 20°C, 100KHz)

Cap. (µF)	WVDC (SV)						
	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)
0.47						6.3	6.3
1						4	4
2.2						2.8	2.8
3.3						2.4	2.4
4.7						2.4	2.4
10			5.2	2.9	2.8	2	1.9
22		2.9	2.8	2	1.5	1.3	0.8
33		2.8	2	1.56	1.3	0.8	0.61
47		1.44	1.36	1.3	0.8	0.7	0.56
100	1.70	0.6	0.5	0.35	0.25	0.17	0.14
220	1.56	0.35	0.25	0.156	0.114	0.076	0.070
330	0.35	0.25	0.156	0.114	0.076	0.065	0.055
470	0.25	0.156	0.114	0.076	0.065	0.055	0.050
1000	0.2	0.076	0.065	0.041	0.038	0.036	0.032
2200	0.13	0.041	0.038	0.036	0.034	0.032	
3300	0.06	0.029	0.025	0.026			
4700	0.036	0.036	0.026	0.024			

LOAD LIFE TEST

