

FEATURES

- 85°C, 2000 hours assured.
- For general purpose applications.

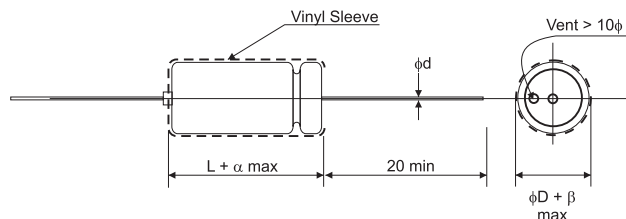


SPECIFICATIONS

Item	Performance																	
Operating Temperature Range	6.3 ~ 250V								350V ~ 450V									
	-40°C ~ +85°C								-25°C ~ +85°C									
Capacitance Tolerance	± 20% (120Hz, 20°C)																	
Leakage Current (at 20°C)	Rated Voltage	≤ 100V								> 100V								
	Time	after 2 minutes								After 5 minutes								
	Leakage Current	I = 0.02CV or 3 (μ A) Whichever is greater								CV ≤ 100 I = 0.03CV + 15 (μ A)				CV > 1000 I = 0.02CV + 25 (μ A)				
Dissipation Factor Tan δ at 120 Hz, 20°C	When C= rated capacitance in μ F. V = rated DC working voltage in V.																	
	Rated Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450			
	Tan δ (max)	0.23	0.20	0.17	0.15	0.12	0.10	0.09	0.08	0.12	0.14	0.17	0.20	0.25	0.25			
When the capacitance exceed 1000 μ F 0.02 shall be added every 1000 μ F increase.																		
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below																	
	Rated Voltage		6.3	10	16	25	35	50	63	100	160	200	250	350	400	450		
	Impedance Ratio	Z(-25°C)	φD<16	6	4	3	3	2	2	2	2	3	6	8	12	14	16	
		/Z(+20°C)	φD>16	8	6	4	4	3	3	3	3							
	Z(-40°C)	φD<16	10	8	6	6	4	3	3	3	4	8	10	-	-	-		
	/Z(+20°C)	φD>16	18	16	12	10	8	8	6	6								
Load Life Test	Test Time	2000 Hrs																
	Capacitance Change	< ± 20%																
	Dissipation Factor	Less than 200% of specified value.																
	Leakage Current	Within specified value																
The above specification shall be satisfied when the capacitors are restored to 20°C after rated voltage applied for 2000 hrs at 85°C.																		
Shelf Life Test	Test Time	1000 Hrs																
	Capacitance Change	≤ ± 20%																
	Dissipation Factor	Less than 200% of specified value																
	Leakage Current	6.3 ~ 100V	Within specified value															
	160 ~ 450V	Less than 200% of specified value																
The above specification shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hrs at 85°C without voltage applied																		
Ripple Current & Frequency Multipliers	Freq. (Hz)	60	120	500	1K	10K up												
	Cap. (μF)	Under 100	0.70	1.00	1.30	1.40	1.50											
		220 to 1000	0.75	1.00	1.20	1.30	1.35											
		2200 up above	0.80	1.00	1.10	1.12	1.15											
Ripple Current & Temperature Multipliers	Temperature (°C)	Under 50	70	85														
	Multipliers	1.78	1.40	1.00														
Standards	Satisfies Characteristic W of JIS C 5141																	

LEAD SPACING AND DIAMETER

φD	5	6.3	8	10	13	16	18	22	25
φd	0.6			0.8			1.0		
α	1.5			2.0					
β	0.5			1.0					



PART NUMBER EXAMPLE

TE 101 M 1E TR 080 130

DIMENSIONS AND PERMISSIBLE RIPPLE CURRENT

Dimension: $\phi D \times L$ (mm)

Ripple Current: mA/RMS at 120Hz 85°C

μF	VDC Code	6.3v(0J)		10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)		63V(1J)	
		$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA
0.1	0R1											5 x 12	1.5	5 x 12	3
0.22	R22											5 x 12	3.5	5 x 12	4.5
0.33	R33											5 x 12	5	5 x 12	7.5
0.47	R47											5 x 12	6	5 x 12	9
1	010											5 x 12	10	5 x 12	15
2.2	2R2											5 x 12	20	5 x 12	30
3.3	3R3											5 x 12	30	5 x 12	36
4.7	4R7											5 x 12	42	5 x 12	44
10	100									5 x 12	55	6.3 x 13	65	6.3 x 13	68
22	220					5 x 12	71	5 x 12	76	6.3 x 13	88	6.3 x 13	96	6.3 x 13	109
33	330			5 x 12	78	5 x 12	88	6.3 x 13	100	6.3 x 13	115	6.3 x 13	126	8 x 13	154
47	470	5 x 12	87	5 x 12	94	6.3 x 13	111	6.3 x 13	119	6.3 x 13	138	8 x 13	174	8 x 16	214
100	101	6.3 x 13	136	6.3 x 13	145	6.3 x 13	174	8 x 13	215	8 x 16	232	10 x 17	296	10 x 17	326
220	221	6.3 x 13	215	6.3 x 13	231	8 x 13	298	8 x 16	319	10 x 17	401	10 x 21	459	13 x 22	527
330	331	8 x 16	305	8 x 16	327	8 x 16	365	10 x 17	454	10 x 21	514	13 x 22	613	13 x 22	675
470	471	8 x 16	364	8 x 16	390	8 x 16	460	10 x 17	524	10 x 21	613	13 x 22	731	13 x 27	780
1000	102	10 x 17	662	10 x 17	671	10 x 21	775	13 x 22	873	13 x 27	955	16 x 33	1111	18 x 37	1249
2200	222	13 x 22	929	13 x 22	1051	13 x 22	1125	16 x 28	1344	16 x 33	1421	18 x 36	1699	22 x 43	1744
3300	332	13 x 27	1150	13 x 27	1288	16 x 28	1454	16 x 33	1611	16 x 37	1640	22 x 43	2027	25 x 52	2309
4700	472	13 x 27	1354	16 x 28	1552	16 x 33	1650	18 x 37	1881	22 x 43	2208	25 x 43	2347		
10000	103	16 x 37	2062	18 x 42	2122	22 x 43	2503	22 x 52	2893						
22000	223	22 x 43	3097												

μF	VDC Code	100V(2A)		160V(2C)		200V(2D)		250V(2E)		350V(2V)		400V(2G)		450V(2W)	
		$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA	$\phi D \times L$	mA
0.1	0R1	5 x 12	3												
0.22	R22	5 x 12	5												
0.33	R33	5 x 12	8												
0.47	R47	5 x 12	9												
1	010	5 x 12	15	6.3 x 13	7	6.3 x 16	9	6.3 x 16	12	8 x 16	13	8 x 16	14	8 x 16	15
2.2	2R2	5 x 12	30	6.3 x 13	15	8 x 16	16	8 x 16	17	8 x 20	19	10 x 17	21	10 x 21	23
3.3	3R3	5 x 12	41	8 x 16	21	8 x 16	26	8 x 20	31	8 x 20	33	10 x 17	34	10 x 21	36
4.7	4R7	6.3 x 13	50	8 x 16	31	8 x 16	33	10 x 17	38	10 x 21	44	13 x 22	45	13 x 22	46
10	100	6.3 x 13	72	10 x 17	60	10 x 21	66	10 x 21	72	13 x 22	77	13 x 22	80	13 x 27	82
22	220	8 x 16	133	13 x 22	121	13 x 22	121	13 x 27	126	13 x 27	132	16 x 33	137	16 x 37	143
33	330	10 x 17	190	13 x 22	154	13 x 27	167	16 x 28	178	16 x 33	186	16 x 37	192	16 x 42	201
47	470	10 x 21	237	13 x 27	198	16 x 32	214	16 x 33	241	16 x 42	253	18 x 43	339	22 x 43	402
100	101	13 x 22	377	16 x 33	345	16 x 37	368	18 x 43	391	22 x 43	402	25 x 52	424	25 x 52	448
220	221	16 x 28	625	18 x 42	586	22 x 43	609	22 x 43	632						
330	331	16 x 33	793	22 x 43	632										
470	471	16 x 37	942												
1000	102	22 x 43	1359												