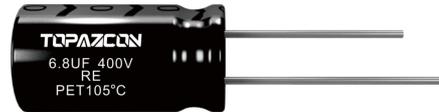


RE Series

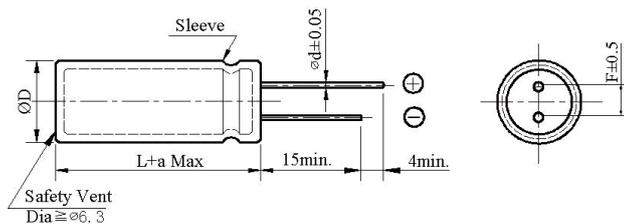
- Standard series for general purpose
- Load life 2,000 ~ 3,000 hours at 105°C
- RoHS Compliant



SPECIFICATIONS

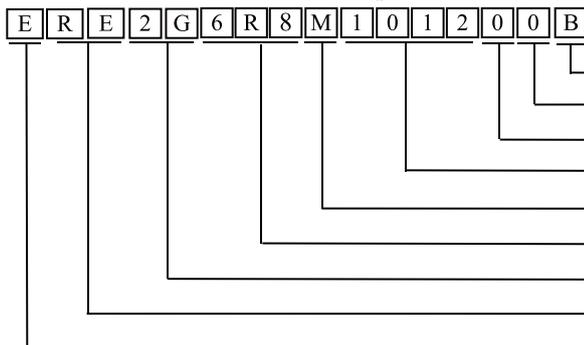
Item	Performance Characteristics											
Category Temperature Range	-40 ~ +105°C											
Working Voltage Range	6.3 ~ 100Vdc					160 ~ 500Vdc						
Capacitance Range	0.1 ~ 22,000μF					0.47 ~ 470μF						
Capacitance Tolerance	±20% (at 20°C and 120Hz)											
Dissipation Factor (tanδ) (at 20°C, 120Hz)	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160 ~ 250	350 ~ 500	
	tanδ(Max)	0.26	0.22	0.18	0.16	0.14	0.12	0.10	0.10	0.20	0.24	
The above values should be increased by 0.02 for every additional 1000μF												
Leakage Current	6.3~100Vdc					160~500Vdc						
	I ≤ 0.01CV or 3μA, Which is greater(2minutes)					I ≤ 0.03CV + 10μA (2minutes)						
I: Leakage current (μA) C: Rated capacitance (μF) V: Rated voltage (V)												
Low Temperature Characteristics Impedance Ratio(MAX)	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160 ~ 250	350 ~ 500	(at 120Hz)
	Z(-25°C)/Z(+20°C)	5	4	3	2	2	2	2	2	6	6	
	Z(-40°C)/Z(+20°C)	12	10	8	5	4	3	3	3	8	8	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 2,000~3,000 hours at 105°C.											
	Capacitance change	≅ ±20% of the initial value										
	Dissipation factor(tanδ)	≅ 200% of the specified value										
	Leakage current	≅ specified value										
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20°C after the rated voltage applied for 1,000 hours at 105°C without voltage applied.											
	Capacitance change	≅ ±20% of the initial value										
	Dissipation factor(tanδ)	≅ 200% of the specified value										
	Leakage current	≅ 200% of the specified value										

DIMENSIONS (mm)



ΦD	5	6.3	8	10	12.5	16	18	20	22
ΦD	ΦD +0.5 Max							ΦD +1.0 Max	
Φd	0.5	0.5	0.5/0.6	0.6	0.6	0.8	0.8	1.0	1.0
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	10
a	L+2.0 Max								

PART NUMBER SYSTEM(Example : 400V 6.8μF)



RE Series

◆ Standard Ratings & Permissible rated ripple current

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max. Rated ripple current mArms@105°C 120Hz
6.3	33	5×11	54
	47	5×11	64
	100	5×11	94
	220	5×11	140
	330	6.3×11	190
	470	6.3×11	230
	1000	8×12	380
	2200	10×20	710
	3300	10×20	840
	4700	12.5×20	1090
	6800	12.5×25	1350
	10000	16×25	1650
	15000	16×35	2010
22000	18×40	2350	
10	22	5×11	46
	33	5×11	57
	47	5×11	68
	100	5×11	100
	220	6.3×11	170
	330	6.3×11	200
	470	8×12	250
	1000	10×12	460
	2200	10×20	760
	3300	12.5×20	1000
	4700	12.5×25	1260
	6800	16×25	1570
	10000	16×35	1890
15000	18×35	2180	
16	10	5×11	34
	22	5×11	51
	33	5×11	63
	47	5×11	75
	100	5×11	110
	220	6.3×11	182
	330	8×12	260
	470	8×12	310
	1000	10×16	560
	2200	12.5×20	920
	3300	12.5×25	1170
	4700	16×25	1480
	6800	16×30	1780
10000	18×35	2060	
25	4.7	5×11	25
	10	5×11	36
	22	5×11	54
	33	5×11	67
	47	5×11	80
	100	6.3×11	130
	220	8×12	230
	330	8×12	310
	470	10×12	380
1000	10×20	680	

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max. Rated ripple current mArms@105°C 120Hz	
25	2200	12.5×25	1090	
	3300	16×25	1400	
	4700	16×30	1710	
	6800	18×35	2040	
35	4.7	5×11	28	
	10	5×11	41	
	22	5×11	61	
	33	5×11	75	
	47	5×11	90	
	100	6.3×11	150	
	220	8×12	270	
	330	10×12	350	
	470	10×16	460	
	1000	12.5×20	810	
	2200	16×25	1260	
	3300	16×35	1610	
	4700	18×35	1910	
50	0.1	5×11	1.3	
	0.22	5×11	2.9	
	0.33	5×11	4.3	
	0.47	5×11	6.2	
	1.0	5×11	13	
	2.2	5×11	20	
	3.3	5×11	25	
	4.7	5×11	30	
	10	5×11	40	
	22	5×11	65	
	33	6.3×11	90	
	47	6.3×11	110	
	100	8×12	180	
220	10×12	300		
330	10×16	410		
470	10×20	530		
1000	12.5×25	950		
2200	16×35	1470		
3300	18×35	1770		
63	10	5×11	46	
	22	5×11	71	
	33	6.3×11	100	
	47	6.3×11	120	
	100	10×12	215	
	220	10×16	335	
	330	10×20	510	
	470	12.5×20	640	
	1000	16×25	930	
	100	0.1	5×11	1.5
		0.22	5×11	3.4
		0.33	5×11	5.0
		0.47	5×11	7.1
1.0		5×11	15	
2.2		5×11	21	
3.3		5×11	29	

RE Series

◆ Standard Ratings & Permissible rated ripple current

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max.Rated ripple current mArms@105°C 120Hz
100	4.7	5×11	32
	10	6.3×11	54
	22	8×12	93
	33	8×12	130
	47	10×12	165
	100	10×20	265
	220	12.5×25	440
	330	16×25	540
	470	16×30	715
	1000	18×40	985
160	3.3	6.3×11	32
	4.7	6.3×11	38
	10	8×12	65
	10	10×12	76
	22	10×12	98
	22	10×16	108
	22	10×20	120
	33	10×16	158
	33	10×20	165
	47	10×20	182
	47	12.5×20	205
	68	12.5×20	265
	100	12.5×25	318
	100	16×25	335
	220	16×30	568
	330	18×35	710
470	18×40	870	
200	1	6.3×11	16
	2.2	6.3×11	22
	3.3	6.3×11	32
	4.7	8×12	48
	10	8×12	78
	10	10×12	82
	10	10×16	86
	12	10×16	95
	15	10×16	110
	22	10×16	128
	22	10×20	132
	33	10×20	185
	33	12.5×20	194
	47	12.5×20	225
	68	12.5×25	308
	82	12.5×25	318
	100	16×25	345
	150	16×25	446
	180	16×30	560
	220	16×35	678
220	18×30	695	
330	18×35	755	
470	18×45	938	

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max.Rated ripple current mArms@105°C 120Hz
250	2.2	6.3×11	22
	3.3	6.3×11	32
	3.3	8×12	34
	4.7	6.3×11	38
	4.7	8×12	48
	10	10×12	75
	10	10×16	84
	22	10×20	128
	22	12.5×20	145
	33	10×20	150
	33	12.5×20	185
	47	12.5×20	232
	47	12.5×25	245
	100	16×25	370
	100	16×30	400
	150	16×35	468
220	18×35	660	
220	18×40	702	
330	18×40	730	
350	0.47	6.3×11	11
	1	6.3×11	16
	2.2	8×12	26
	3.3	8×12	34
	3.3	10×12	38
	4.7	8×12	48
	4.7	10×12	52
	10	10×12	68
	10	10×16	82
	10	10×20	88
	22	12.5×20	154
	33	12.5×20	184
33	16×20	198	
47	16×25	250	
68	16×25	335	
100	18×30	398	
400	1	6.3×11	16
	2.2	6.3×11	30
	2.2	8×12	34
	3.3	8×12	35
	3.3	10×12	38
	4.7	8×12	48
	6.8	10×12	52
	10	10×16	98
	10	10×20	115
	22	12.5×25	192
	33	16×20	258
	47	16×25	305
	68	16×30	465
	68	18×25	445
82	18×25	474	

RE Series

◆ Standard Ratings & Permissible rated ripple current

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max.Rated ripple current mArms@105°C 120Hz
400	100	16×40	544
	100	18×30	532
	120	18×35	588
	150	18×40	668
450	0.47	8×12	11
	1	8×12	18
	2.2	8×12	25
	2.2	10×12	32
	3.3	10×12	36
	3.3	10×16	40
	4.7	10×20	55
	10	10×20	90
	10	12.5×20	100
	22	12.5×25	168
	22	16×20	185
	33	16×25	215
	47	16×30	344
	68	18×25	455
	82	18×30	472
	100	18×35	530
120	18×40	582	
150	18×50	700	

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max.Rated ripple current mArms@105°C 120Hz
500	4.7	10×16	50
	10	12.5×20	115
	15	12.5×25	140
	22	16×25	185
	33	18×25	215
	47	18×30	345
	68	18×35	390
	82	18×40	490
	100	22×35	535
	120	22×40	550
	150	22×45	580

◆ RIRIPPLE CURRENT MULTIPLIERS Frequency Multipliers

Cap(μF)	Frequency (Hz)					
	50	120	300	1K	10K	100K
Cap<10	0.65	1.00	1.35	1.75	2.30	2.50
10≤Cap<100	0.75	1.00	1.25	1.50	1.75	1.80
100≤Cap≤1000	0.80	1.00	1.15	1.30	1.40	1.50
Cap>1000	0.85	1.00	1.03	1.05	1.08	1.08