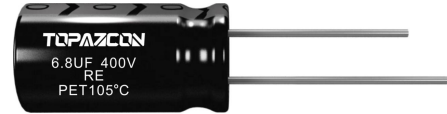


RE Series

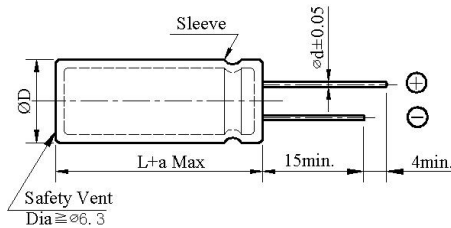
- Standard series for general purpose
- Load life 2,000 ~ 3,000 hours at 105°C
- RoHS Compliant



SPECIFICATIONS

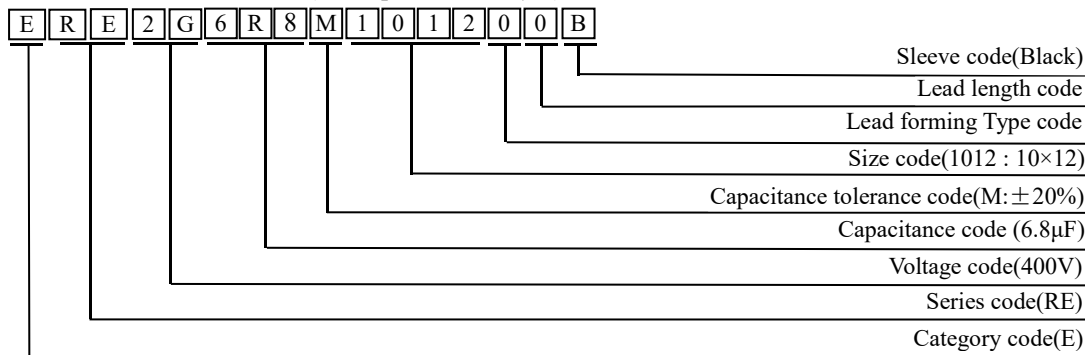
Item	Performance Characteristics												
Category Temperature Range	-40 ~ +105℃								-25 ~ +105℃				
Working Voltage Range	6.3 ~ 450Vdc								500 ~ 550Vdc				
Capacitance Range	0.1 ~ 22,000μF								4.7 ~ 150μF				
Capacitance Tolerance	±20% (at 20℃ and 120Hz)												
Dissipation Factor (tanδ) (at 20℃, 120Hz)	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	160 ~ 250	350 ~ 550		
	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						160~550Vdc						
	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	350~450	500~550	(at 120Hz)
	Z(-25℃)/Z(+20℃)	5	4	3	2	2	2	2	2	6	6	8	
	Z(-40℃)/Z(+20℃)	12	10	8	5	4	3	3	3	8	8	-	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for 2,000~3,000 hours at 105℃.												
	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℃ after the rated voltage applied for 1,000 hours at 105℃ 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 mA _{rms} @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	6.3×11	240
	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	100
	100	5×11	110
	220	6.3×11	182
	330	8×12	260
	470	8×12	370
	1000	10×16	600
	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	38
	22	5×11	58
	33	5×11	75
	47	5×11	105
	100	6.3×11	145
	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 mA _{rms} @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
	0.1	5×11	1.3
50	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	32
	10	5×11	54
	22	5×11	65
	33	6.3×11	90
	47	6.3×11	115
	100	8×12	229
	220	10×12	300
	330	10×16	410
63	470	10×20	530
	1000	12.5×25	950
	2200	16×35	1470
	3300	18×35	1770
	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
	0.1	5×11	1.5
100	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 mAmps@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 mAmps@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
350	150	16×35	468
	220	18×35	660
	220	18×40	702
	330	18×40	730
	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
400	33	12.5×20	184
	33	16×20	198
	47	16×25	250
	68	16×25	335
	100	18×30	398
	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
470	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 mA _{rms} @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	18×20	390
	82	18×25	472
	100	18×30	530
	120	18×35	600
	150	18×40	780
	180	18×45	900
	220	18×50	1020

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max.Rated ripple current mA _{rms} @105°C 120Hz
500	4.7	10×16	50
	10	10×20	115
	15	12.5×16	140
	22	12.5×20	170
	33	16×20	220
	47	18×20	350
	68	18×25	410
	82	18×30	490
	100	18×35	535
	120	18×40	580
	150	22×40	630
550	8.2	10×20	100
	10	12.5×16	125
	15	12.5×20	155
	22	16×20	188
	33	18×20	235
	47	18×25	370
	56	18×30	405
	68	18×35	430
	82	18×40	505
	100	18×45	560
	120	22×40	600

◆ 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