

TG Series

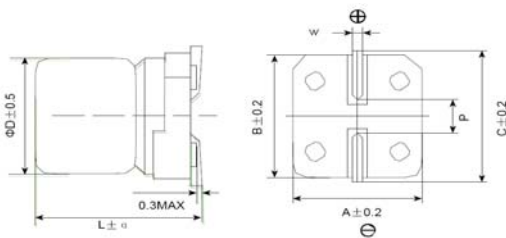
- Suitable for high density mounting
- Endurance: 105°C 10000 hours
- RoHS Compliant



● SPECIFICATIONS

Items	Characteristics										
Category Temperature	-40 to +105°C										
Rated Voltage Range	16 to 450Vdc										
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)										
Leakage Current	16 to 100 Vdc					160 to 450 Vdc					(at 20°C)
	I ≅ 0.03CV or 4uA Whichever is greater (at 2 minutes)					I ≅ 0.04CV+100uA (at 1 minute)					
	Where, I: Max. leakage current (uA); C: Nominal capacitance (uF); V: Rated voltage (V).										
Dissipation (tan δ)	Rate voltage (Vdc)	16	25	35	50	63	80	100	160 to 250	400 to 450	(at 20°C, 120Hz)
	Tan δ (Max)	0.26	0.16	0.14	0.14	0.20	0.20	0.20	0.20	0.24	
Low Temperature Characteristics (Max. Impedance Ratio)	Rate voltage (Vdc)	16	25	35	50	63	80	100	160 to 250	400 to 450	(at 120Hz)
	Z(-25°C)/Z(+20°C)	2	2	2	2	2	2	2	6	6	
	Z(-40°C)/Z(+20°C)	6	4	3	3	3	3	3	10	18	
Endurance	The following specification shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 10000 hours at 105°C.										
	Rate voltage (Vdc)	16 to 100V					160 to 450V				
	Capacitance Change	≤±30% of the initial value					≤±20% of the initial value				
	D.F. (tan δ)	≤300% of the initial specified value					≤200% of the initial specified value				
	Leakage Current	≤the initial specified value					≤the initial specified value				
Shelf Life	The following specification shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 105°C, without voltage applied.										
	Rate voltage (Vdc)	16 to 100V					160 to 450V				
	Capacitance Change	≤±30% of the initial value					≤±20% of the initial value				
	D.F. (tan δ)	≤300% of the initial specified value					≤200% of the initial specified value				
	Leakage Current	≤300% of the initial specified value					≤200% of the initial specified value				

◆ DIMENSIONS (mm)



Size code	D	L	A	B	C	W	P
0608	6.3	7.7	6.6	6.6	7.2	0.5~0.8	1.9
0811	8	10.5	8.3	8.3	9.0	0.7~1.1	3.1
0812	8	12.5	8.3	8.3	9.0	0.7~1.1	3.1
1010	10	10.5	10.3	10.3	11.0	0.7~1.1	4.5
1012	10	12.5	10.3	10.3	11.0	0.7~1.1	4.5
1014	10	13.5	10.3	10.3	11.0	0.7~1.1	4.5
1214	12.5	13.5	13.0	13.0	13.7	1.0~1.3	4.2
1216	12.5	16.0	13.0	13.0	13.7	1.0~1.3	4.2
1616	16	16.5	17.0	17.0	18.0	1.0~1.3	6.5
1621	16	21.5	17.0	17.0	18.0	1.0~1.3	6.5
1816	18	16.5	19.0	19.0	20.0	1.0~1.3	6.5
1821	18	21.5	19.0	19.0	20.0	1.0~1.3	6.5

◆ RATED RIPPLE CURRENT MULTIPLIERS

WV (Vdc)	Freq. (Hz)	120	1K	10K	100K
16 to 450		0.50	0.80	0.90	1.00

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◆ STANDARD RATINGS

WV (Vdc)	Cap (uF)	Size code	tan δ	Ripple current (mArms/105°C, 100KHz)
16 (1C)	47	0608	0.26	125
	100	0810	0.26	245
	220	0810	0.26	260
	330	1010	0.26	450
	470	1012	0.26	480
	680	1214	0.26	820
	1000	1216	0.26	860
25 (1E)	47	0608	0.16	125
	100	0810	0.16	245
	220	1010	0.16	440
	330	1010	0.16	460
	470	1214	0.16	820
	680	1216	0.16	860
35 (1V)	33	0608	0.14	125
	47	0608	0.14	140
	100	0810	0.14	245
	220	1010	0.14	440
	330	1214	0.14	820
	470	1216	0.14	860
50 (1H)	10	0608	0.14	100
	22	0608	0.14	105
	33	0608	0.14	110
	47	0810	0.14	260
	47	1010	0.14	400
	100	1010	0.14	420
	220	1214	0.14	800
	330	1216	0.14	845
63 (1J)	22	0608	0.20	95
	33	0810	0.20	180
	47	0810	0.20	210
	100	1012	0.20	420
	220	1216	0.20	820
80 (1K)	10	0810	0.20	165
	22	0810	0.20	180
	22	1010	0.20	305
	33	0810	0.20	190
	47	1010	0.20	350
	100	1214	0.20	760
100 (2A)	10	0810	0.20	150
	22	0810	0.20	165
	33	1010	0.20	280
	47	1010	0.20	320
	68	1014	0.20	350
	82	1214	0.20	530
	100	1214	0.20	555

WV (Vdc)	Cap (uF)	Size code	tan δ	Ripple current (mArms/105°C, 100KHz)
160 (2C)	10	1010	0.20	190
	15	1214	0.20	280
	22	1216	0.20	400
	33	1616	0.20	560
	47	1616	0.20	640
	68	1621	0.20	800
	100	1821	0.20	1120
	200 (2D)	10	1214	0.20
15		1214	0.20	280
22		1216	0.20	400
33		1621	0.20	500
33		1816	0.20	490
47		1621	0.20	660
47		1821	0.20	700
68		1821	0.20	860
250 (2E)	4.7	1010	0.20	120
	10	1214	0.20	220
	15	1216	0.20	300
	22	1616	0.20	440
	33	1816	0.20	540
	47	1621	0.20	660
	47	1821	0.20	700
	56	1821	0.20	800
400 (2G)	2.2	1010	0.24	70
	3.3	1214	0.24	100
	4.7	1214	0.24	144
	6.8	1216	0.24	200
	10	1616	0.24	280
	15	1621	0.24	340
	22	1621	0.24	460
450 (2W)	2.2	1010	0.24	70
	3.3	1214	0.24	100
	4.7	1216	0.24	150
	10	1616	0.24	280
	15	1621	0.24	340
	22	1821	0.24	460