

TG Series

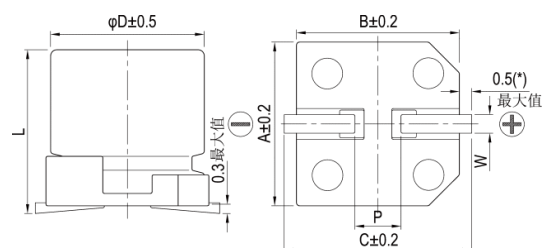
- Designed for surface mounting on high density PC board
- Load life 10,000 hours at 105°C
- RoHS Compliant



SPECIFICATIONS

Item	Performance Characteristics																						
Category Temperature Range	-40 ~ +105°C																						
Working Voltage Range	16 ~ 450Vdc																						
Capacitance Range	2.2 ~ 1,000 μF																						
Capacitance Tolerance	±20% (at 20°C and 120Hz)																						
Dissipation Factor (tanδ) (at 20°C, 120Hz)	<table border="1"> <tr> <th>Rated Voltage (V)</th> <td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>80</td><td>100</td><td>160 ~ 250</td><td>400 ~ 450</td> </tr> <tr> <th>Tanδ(Max)</th> <td>0.26</td><td>0.16</td><td>0.14</td><td>0.14</td><td>0.14</td><td>0.12</td><td>0.12</td><td>0.20</td><td>0.24</td> </tr> </table>	Rated Voltage (V)	16	25	35	50	63	80	100	160 ~ 250	400 ~ 450	Tanδ(Max)	0.26	0.16	0.14	0.14	0.14	0.12	0.12	0.20	0.24		
	Rated Voltage (V)	16	25	35	50	63	80	100	160 ~ 250	400 ~ 450													
Tanδ(Max)	0.26	0.16	0.14	0.14	0.14	0.12	0.12	0.20	0.24														
Leakage Current	<table border="1"> <tr> <th>16~100Vdc</th> <td colspan="5"></td> <th>160~450Vdc</th> <td colspan="4"></td> </tr> <tr> <td>$I \leq 0.03CV$ or $4\mu A$, Which is greater(2minutes)</td> <td colspan="5"></td> <td>$I \leq 0.04CV + 100\mu A$ (1minutes)</td> <td colspan="4"></td> </tr> </table>	16~100Vdc						160~450Vdc					$I \leq 0.03CV$ or $4\mu A$, Which is greater(2minutes)						$I \leq 0.04CV + 100\mu A$ (1minutes)				
	16~100Vdc						160~450Vdc																
$I \leq 0.03CV$ or $4\mu A$, Which is greater(2minutes)						$I \leq 0.04CV + 100\mu A$ (1minutes)																	
Low Temperature Characteristics Impedance Ratio(MAX)	I: Leakage current (μA) C: Rated capacitance (μF) V: Rated voltage (V)																						
	Rated Voltage (V)	16	25	35	50	63	80	100	160 ~ 250	400 ~ 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 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 10,000 hours at 105°C.																						
	Rated Voltage (Vdc)	16~100Vdc					160~450Vdc																
	Capacitance change	≅ ±30% of the initial value					≅ ±20% of the initial value																
	Dissipation factor(tanδ)	≅ 300% of the specified value					≅ 200% of the specified value																
	Leakage current	≅ specified value					≅ 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.																						
	Rated Voltage (Vdc)	16~100Vdc					160~450Vdc																
	Capacitance change	≅ ±30% of the initial value					≅ ±20% of the initial value																
	Dissipation factor(tanδ)	≅ 300% of the specified value					≅ 200% of the specified value																
	Leakage current	≅ 300% of the specified value					≅ 200% of the specified value																

DIMENSIONS (mm)

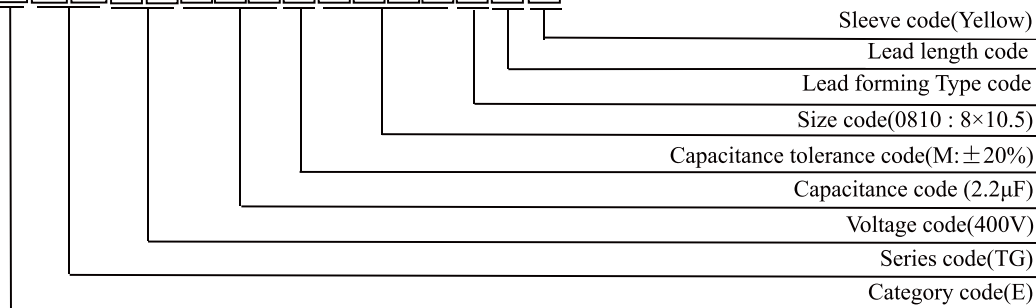


Note:(*):5~6.3Φ 0.4Max

Size	D	L	A	B	C	W	P
06×08	6.3	7.7±0.5	6.6	6.6	7.2	0.5~0.8	1.9
06×10	6.3	10.5±0.5	6.6	6.6	7.2	0.5~0.8	1.9
08×10	8	10.5±0.5	8.3	8.3	9.0	0.7~1.1	3.1
08×12	8	12.5±0.5	8.3	8.3	9.0	0.7~1.1	3.1
08×14	8	13.5±0.5	8.3	8.3	9.0	0.7~1.1	3.1
08×16	8	15.5±0.5	8.3	8.3	9.0	0.7~1.1	3.1
10×10	10	10.5±0.5	10.3	10.3	11.0	0.7~1.1	4.5
10×12	10	12.5±0.5	10.3	10.3	11.0	0.7~1.1	4.5
10×14	10	13.5±0.5	10.3	10.3	11.0	0.7~1.1	4.5
10×16	10	16.5±0.5	10.3	10.3	11.0	0.7~1.1	4.5
12×14	12.5	13.5±1.0	13.0	13.0	13.7	1.0~1.3	4.5
12×16	12.5	16.0±1.0	13.0	13.0	13.7	1.0~1.3	4.5
12×21	12.5	21.0±1.0	13.0	13.0	13.7	1.0~1.3	4.5

PART NUMBER SYSTEM(Example : 400V 2.2μF)

E T G 2 G 2 R 2 M 0 8 1 0 0 0 Y



TG Series

◆ Standard Ratings

WV (Vdc)	Cap (μF)	Size	Max. Rated ripple current @105°C 100KHz
16	47	06×08	125
	100	06×08	245
	220	08×10	260
	330	10×10	450
	470	10×12	480
	680	12×14	820
	1000	12×16	860
25	47	06×08	125
	100	08×10	245
	220	10×10	260
	330	10×10	450
	470	12×14	480
	680	12×16	820
35	33	06×08	125
	47	06×08	140
	100	08×10	245
	220	10×10	440
	330	12×14	820
50	470	12×16	860
	10	06×08	100
	22	06×08	105
	33	06×08	110
	47	08×10	260
	47	10×10	400
	100	10×10	420
220	12×14	800	
330	12×16	845	
63	22	06×08	95
	33	08×10	180
	47	08×10	210
	100	10×12	420
	220	12×16	820
80	10	08×10	165
	22	08×10	180
	22	10×10	305
	33	08×10	190
	47	10×10	350
	100	12×14	760
100	10	06×08	150
	22	08×10	165
	33	10×10	280
	47	10×10	320
	68	10×12	350
	82	12×14	530
	100	12×14	555

WV (Vdc)	Cap (μF)	Size	Max. Rated ripple current @105°C 100KHz
160	10	10×10	190
	15	08×12	220
	22	10×12	315
	33	10×14	420
	47	10×16	530
	68	12×21	640
	100	12×21	840
	200	4.7	08×10
6.8		08×10	150
10		10×10	198
15		08×14	230
22		10×14	350
33		10×16	440
68		12×21	670
250	2.2	06×10	52
	4.7	08×10	120
	10	10×10	200
	22	10×16	360
	33	12×21	435
	47	12×21	600
400	2.2	08×10	60
	3.3	08×10	76
	4.7	08×14	124
	6.8	10×14	176
	10	10×16	250
	15	12×16	300
	22	12×21	380
	450	2.2	10×10
3.3		10×10	80
4.7		10×14	130
10		10×16	265
15		12×21	310
22		12×21	390

◆ RIRIPPLE CURRENT MULTIPLIERS Frequency Multipliers

Vdc	Frequency (Hz)			
	120	1K	10K	100K
16 ~ 450	0.50	0.80	0.90	1.00