

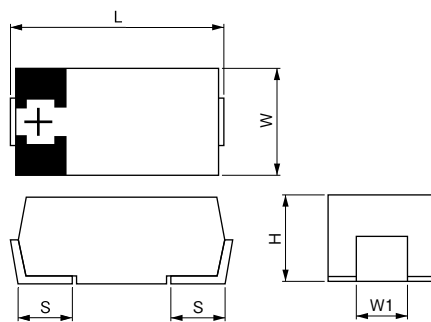
TPG series is designed to be small, have a low-profile and large capacitance .
Suitable for the space sensitive electronic devices.



Specifications

Items	Condition			Specifications					
Rated voltage (V)	—			2.5	4.0	6.3	8.0	10	12.5
Surge voltage (V)	—			2.9	4.6	7.2	9.2	12	14
Category temperature range (°C)	—			−55 to +105					
Capacitance tolerance (%)	120Hz/20°C			M : ±20					
Rated capacitance range (μF)	120Hz/20°C			33 to 220					
Dissipation Factor (DF)	120Hz/20°C			Please see the attached characteristics list					
Leakage current	Rated voltage applied, after 5 minutes			Please see the attached characteristics list					
Equivalent series resistance (ESR)	100kHz/20°C			Please see the attached characteristics list					
Characteristics of impedance ratio at high temp. and low temp.	100kHz/+20°C	−55°C	Z/Z _{20°C}	0.6 to 2.0					
		+105°C	Z/Z _{20°C}	0.6 to 2.0					
Endurance	85°C, 1,000h rated voltage applied	ΔC/C	Within±20% of the initial value						
		DF	≤ 1.5 times of the initial limit						
		LC	Within the initial limit						
Damp heat (Steady State)	60°C, 90 to 95%RH, 500h, No-applied voltage	ΔC/C	Within+40%, −20% of the initial value						
		DF	≤ 1.5 times of the initial limit						
		LC	≤ 3 times of the initial limit						
Surge	85°C, 1,000 cycles, 1kΩ discharge resistance, surge voltage applied	ΔC/C	Within±5% of the initial value						
		DF	Within the initial limit						
		LC	≤ 3 times of the initial limit						

Dimensions



(unit: mm)

Size code	L ^{+0.3} _{-0.1}	W ^{+0.3} _{-0.1}	H ^{±0.1}	S ^{±0.2}	W1 ^{±0.1}
B1G	3.5	2.8	1.1	0.8	2.2
B15G	3.5	2.8	1.4	0.8	2.2

Size list

RV : Rated voltage

RV	2.5	4.0	6.3	8.0	10	12.5
μF						
33						B1G
47				B1G	B1G	
100			B1G			
150			B15G			
220	B1GB15G	B15G	B15G			

TPG series characteristics list

Size code	Part number	Rated voltage (V)	Rated temperature (°C)	Rated capacitance (μF)	Category voltage (V)	Category temperature (°C)	DF (% max)	LC (μA) max/5min.	ESR (mΩmax) 100kHz/20°C	Maximum allowable ripple current (mA rms) 100kHz*1	MSL	Reflow temp. ≤ 260°C	Reflow temp. ≤ 250°C
B1G	12TPG33M	12.5	85	33	10	105	10.0	41.3	70	1000	3	3	
	10TPG47M	10	85	47	8.0	105	10.0	47.0	70	1000	3	3	
	8TPG47M	8.0	85	47	6.4	105	10.0	37.6	70	1000	3	3	
	6TPG100M	6.3	85	100	5.0	105	10.0	63.0	70	1000	3	3	
	6TPG100MG	6.3	85	100	5.0	105	10.0	63.0	55	1100	3	3	
	2R5TPG220M	2.5	85	220	2.0	105	10.0	55.0	70	1000	3	3	
B15G	6TPG220MZG*2	6.3	85	220	5.0	105	10.0	277.2	35/300kHz	1200	3	3	
	6TPG150M	6.3	85	150	5.0	105	10.0	94.5	70	1000	3	3	
	6TPG150MZG	6.3	85	150	5.0	105	10.0	189.0	35/300kHz	1200	3	3	
	4TPG220M	4.0	85	220	3.2	105	10.0	88.0	70	1000	3	3	
	2R5TPG220MUG	2.5	85	220	2.0	105	10.0	110.0	30/300kHz	1400	3	3	

*1 100k to 500kHz, 45°C *2 Under development

* Red letters : New models