



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## Surface Mount Type

# POSCAP



Series : TPG

### Features

- Small size, Low profile (L3.5 × W 2.8 × H 1.1 mm)
- Large capacitance (220 μF max.)
- RoHS compliance, Halogen free

### Specifications

Size code	B1G	B15G
Category temperature range	-55 °C to +105 °C	
Rated voltage range	2.5 V.DC to 12.5 V.DC	2.5 V.DC to 6.3 V.DC
Category voltage range	2.0 V.DC to 10.0 V.DC	2.0 V.DC to 5.0 V.DC
Rated capacitance range	33 μF to 220 μF	150 μF to 220 μF
Capacitance tolerance	±20 % (120 Hz / + 20 °C)	
Leakage current	Please see the attached characteristics list	
Dissipation factor (tan δ)	Please see the attached characteristics list	
Surge voltage (V.DC)	Rated voltage × 1.15	
Endurance	+85 °C, 1000 h rated voltage applied	
	Capacitance change	Within ±20 % of the initial value
	tan δ	≤ 1.5 times of the initial limit
	DC leakage current	Within the initial limit
Damp heat (Steady State)	+60 °C, 90 % to 95 %, 500 h, No-applied voltage	
	Capacitance change	Within +40 %, -20 % of the initial value
	tan δ	≤ 1.5 times of the initial limit
	DC leakage current	≤ 3 times of the initial limit

### Marking

R. Voltage (V.DC)	2.5	4.0	6.3	8.0	10.0	12.5
Code	e	g	j	k	A	B
R. Cap. (μF)	33	47	100	150	220	
Code	N7	S7	A8	E8	J8	

### Dimensions (not to scale)

Size code	L <sup>+0.3</sup> <sub>-0.1</sub>	W <sup>+0.3</sup> <sub>-0.1</sub>	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

Unit : mm

\* Externals of figure are the reference.

### Characteristics list

Series	Rated voltage (V.DC)	Rated temp. (°C)	Category voltage (V.DC)	Category temp. (°C)	Rated capacitance (μF)	Case size (mm)			Size code	Specifications				Standard	
						L	W	H		Ripple*1 current (mAr.m.s.)	ESR*2 (mΩ max.)	tan δ*3	LC*4 (μA)	Part number	Mn. Packaging Qty (pcs)
TPG	2.5	85	2.0	105	220	3.5	2.8	1.1	B1G	1000	70	0.10	55.0	2R5TPG220M	2500
		85	2.0	105		3.5	2.8	1.4	B15G	1400	30/300 kHz	0.10	110.0	2R5TPG220MUG	2500
	4	85	3.2	105	220	3.5	2.8	1.4	B15G	1000	70	0.10	88.0	4TPG220M	2500
		85	5.0	105		100	3.5	2.8	1.1	B1G	1000	70	0.10	63.0	6TPG100M
	6.3	85	5.0	105	100		3.5	2.8	1.1	B1G	1100	55	0.10	63.0	6TPG100MG
		85	5.0	105		3.5	2.8	1.1	B1G	1200	35/300 kHz	0.10	126.0	6TPG100MZGD	2500
		85	5.0	105	150	3.5	2.8	1.4	B15G	1000	70	0.10	94.5	6TPG150M	2500
		85	5.0	105		3.5	2.8	1.4	B15G	1200	35/300 kHz	0.10	189.0	6TPG150MZG	2500
	8	85	6.3	105	47	3.5	2.8	1.1	B1G	1000	70	0.10	37.6	8TPG47M	2500
	10	85	8.0	105	47	3.5	2.8	1.1		1000	70	0.10	47.0	10TPG47M	2500
	12.5	85	10.0	105	33	3.5	2.8	1.1		1000	70	0.10	41.3	12TPG33M	2500

\*1 Ripple current (100 kHz/ +45 °C), \*2 ESR (100 kHz/+20 °C) \*3 tan δ (120 Hz/+20 °C) \*4 After 5 minutes

◆ Please refer to each page in this catalog for "Reflow conditions" and "Taping specifications".