

TPB Series

Standard Products (B2 Size)

Feature

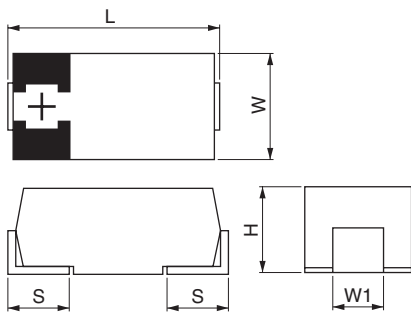
B2 size is the miniaturized version of TPB series.



Specifications

Items	Condition	Characteristics		
Operating Temperature range	—	-55 to +105 (°C)		
Rated capacitance range	120Hz/20°C	33 to 220 (μF)		
Capacitance tolerance	120Hz/20°C	M:±20%		
Rated voltage	—	2.5 to 10 (V.DC)		
Dissipation Factor (D.F.)	120Hz/20°C	≤ 8.0 (%)		
Leakage current	Rated voltage applied, after 5 minutes	Please see the attached characteristic list		
Equivalent series resistance (E.S.R. mΩmax.)	100kHz/20°C	Please see the attached characteristic list		
Temperature characteristics of Impedance ratio	100kHz/+20°C	-55°C	Z/Z _{20°C}	1.0 to 2.0
		+105°C	Z/Z _{20°C}	0.6 to 1.0
Endurance	105°C, 1000h, rated voltage applied *Rated temp. 85°C products: 85°C, 1000h, rated voltage applied	ΔC/C	Within±20% of the initial value	
		D.F.	≤ 1.5 times the initial limit	
		L.C.	≤ The initial limit	
Damp heat (Steady state)	60°C, 90 to 95%RH, 500h, No voltage applied	ΔC/C	Within+40%, -20% of the initial value	
		D.F.	≤ 1.5 times the initial limit	
		L.C.	≤ 3 times the initial limit	
Surge	105°C, 1000 cycles, 1kΩ discharge resistance, surge voltage applied *6TPB100MA, 4TPB150MA, 2R5TPB220MA : 85°C	ΔC/C	Within±5% of the initial value	
		D.F.	≤ The initial limit	
		L.C.	≤ 3 times the initial limit	

Dimensions



(unit: mm)

Size code	L (±0.2)	W (±0.2)	H (±0.1)	S (±0.2)	W1 (±0.1)
B2	3.5	2.8	1.9	0.8	2.2

Size List

μF	RV (SV)	2.5 (3.2)	4.0 (5.0)	6.3 (8.0)	8.0 (10.0)	10.0 (13.0)
33					B2	B2
47				B2	B2	B2
68			B2	B2		
100		B2	B2	B2		
150			B2			
220		B2				

Characteristics List

Size code	SANYO Part number	Rated Voltage (V)	Rated Temperature (°C)	Rated Capacitance (μF)	Category Voltage (V)	Category Temperature (°C)	D.F. (%max.)	L.C. (μA) max./5min.	E.S.R. (mΩmax.) 100kHz/20°C	Maximum allowable ripple current (mA _{rms}) 100kHz*1	MSL	
											Reflow Temp. ≤ 260°C	Reflow Temp. ≤ 250°C
B2	10TPB47M	10.0	105	47	10.0	105	8.0	47.0	70	1100	3	3
	10TPB33M	10.0	105	33	10.0	105	8.0	33.0	70	1100		
	8TPB47M	8.0	105	47	8.0	105	8.0	37.6	70	1100		
	8TPB33M	8.0	105	33	8.0	105	8.0	26.4	70	1100		
	6TPB100MA	6.3	85	100	5.0	105	8.0	63.0	55	1200		
	6TPB100MAV	6.3	85	100	5.0	105	8.0	63.0	45	1400		
	6TPB68M	6.3	105	68	6.3	105	8.0	42.8	70	1100		
	6TPB47M	6.3	105	47	6.3	105	8.0	29.6	70	1100		
	4TPB150MA	4.0	85	150	3.2	105	8.0	60.0	70	1100		
	4TPB100M	4.0	105	100	4.0	105	8.0	40.0	70	1100		
	4TPB100MV	4.0	105	100	4.0	105	8.0	40.0	45	1300		
	4TPB68M	4.0	105	68	4.0	105	8.0	27.2	70	1100		
	2R5TPB220MA	2.5	85	220	2.0	105	8.0	55.0	55	1200		
	2R5TPB100M	2.5	105	100	2.5	105	8.0	25.0	70	1100		

*1 100k to 500kHz, 45°C