

TPB Series Standard Products (B2 Size)

Feature

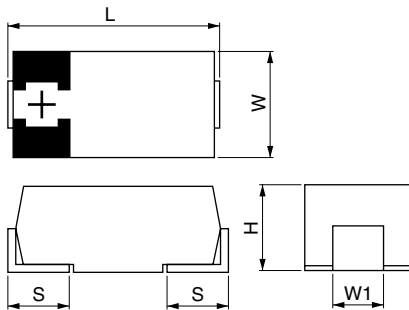
B2 size is the miniaturized version of TPB series.



Specifications

Items	Condition	Characteristics		
Operating Temperature range	—	-55 to +105 (°C)		
Rated capacitance range	120Hz/20°C	33 to 150 (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	≤ 0.1CV (μA)		
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 : 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

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			

Characteristics List

(Rated Temperature 105°C Products)

Size code	SANYO Part number	Rated Voltage (V)	Rated Temperature (°C)	Rated Capacitance (μF)	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	8.0	47.0	70	1100	3	3
	10TPB33M	10.0	105	33	8.0	33.0	70	1100		
	8TPB47M	8.0	105	47	8.0	37.6	70	1100		
	8TPB33M	8.0	105	33	8.0	26.4	70	1100		
	6TPB68M	6.3	105	68	8.0	42.8	70	1100		
	6TPB47M	6.3	105	47	8.0	29.6	70	1100		
	4TPB100M	4.0	105	100	8.0	40.0	70	1100		
	4TPB68M	4.0	105	68	8.0	27.2	70	1100		
	4TPB100MV	4.0	105	100	8.0	40.0	45	1300		
	2R5TPB100M	2.5	105	100	8.0	25.0	70	1100		

*1 100k to 500kHz, 45°C

(Rated Temperature 85°C Products)

Size code	SANYO Part number	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	Rated Capacitance (μF)	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	6TPB100MA	6.3	85	5.0	105	100	8.0	63.0	55	1200	3	3
	4TPB150MA	4.0	85	3.2	105	150	8.0	60.0	70	1100		

*1 100k to 500kHz, 45°C