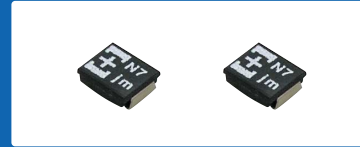


TPC Series B1 Size

Feature

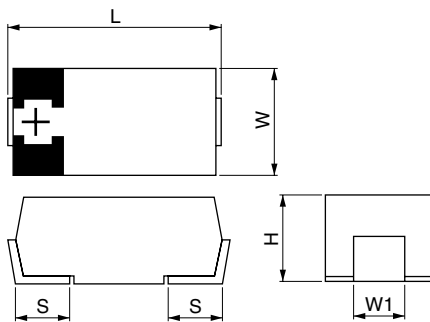
B1 size is miniaturized, low profile version of TPC series.



Specifications

Items	Condition	Characteristics		
Operating Temperature range	—	-55 to +105 (°C)		
Rated capacitance range	120Hz/20°C	10 to 56 (μF)		
Capacitance tolerance	120Hz/20°C	M: ±20%		
Rated voltage	—	2.5 to 12.5 (V.DC)		
Dissipation Factor (D.F.)	120Hz/20°C	≤ 10.0 (%)		
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 characteristics 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	85°C, 1000h, rated voltage applied or 105°C, 1000h, category 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	85°C, 1000 cycles, 1kΩ discharge resistance, surge voltage applied	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)
B1	3.5	2.8	1.1	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)	12.5 (16.0)
10						B1
15						B1
22				B1		
33			B1		B1	
47		B1	B1			
56	B1					

Characteristics List

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
B1	12TPC15M	12.5	85	10.0	105	15	10.0	18.8	80	800	3	3
	12TPC10M	12.5	85	10.0	105	10	10.0	12.5	80	800		
	10TPC33MB	10.0	85	8.0	105	33	10.0	33.0	70	1000		
	8TPC22M	8.0	85	6.3	105	22	10.0	17.6	70	1000		
	6TPC47MB	6.3	85	5.0	105	47	10.0	29.6	70	1000		
	6TPC33M	6.3	85	5.0	105	33	10.0	20.8	70	1000		
	4TPC47M	4.0	85	3.2	105	47	10.0	18.8	70	1000		
	2R5TPC56M	2.5	85	2.0	105	56	10.0	14.0	70	1000		

*1 100k to 500kHz, 45°C