

TPC Series Low Profile Products

Feature

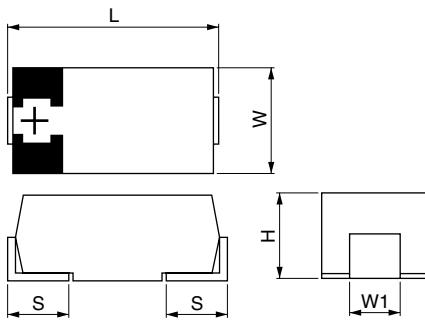
TPC series has low profile and low ESR. TPC series aids in the miniaturization of any products.



Specifications

Items	Condition	Characteristics		
Operating Temperature range	—	-55 to +105 (°C)		
Rated capacitance range	120Hz/20°C	33 to 330 (μF)		
Capacitance tolerance	120Hz/20°C	M:±20%		
Rated voltage	—	2.5 to 10 (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	105°C,2000h, rated voltage applied C1 size:1000h	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, 1kΩdischarge 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)
C1	6.0	3.2	1.4	1.3	1.8
D2	7.3	4.3	1.9	1.3	2.4

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				C1	
56		C1			
68			C1		D2
82	C1				
100		C1	D2,C1		D2
150		D2	D2	D2	
220	D2	D2			
330	D2		D2		

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 (mArms) 100kHz*1	MSL	
									Reflow Temp. ≤ 260°C	Reflow Temp. ≤ 250°C
C1	8TPC33M	8.0	105	33	10.0	26.4	70	1200	3	3
	6TPC100MC	6.3	105	100	10.0	63.0	55	1300		
	6TPC68M	6.3	105	68	10.0	42.8	55	1300		
	4TPC100M	4.0	105	100	10.0	40.0	55	1300		
	4TPC56M	4.0	105	56	10.0	22.4	70	1200		
	2R5TPC82M	2.5	105	82	10.0	20.5	70	1200		
D2	10TPC100M	10.0	105	100	10.0	100.0	45	1700	3	2a
	10TPC68M	10.0	105	68	10.0	68.0	45	1700		
	8TPC150M	8.0	105	150	10.0	120.0	40	1900		
	6TPC150M	6.3	105	150	10.0	94.5	40	1900		
	6TPC100M	6.3	105	100	10.0	63.0	45	1700		
	4TPC220M	4.0	105	220	10.0	88.0	40	1900		
	4TPC150M	4.0	105	150	10.0	60.0	45	1700		
	2R5TPC330M	2.5	105	330	10.0	82.5	40	1900		
	2R5TPC220M	2.5	105	220	10.0	55.0	45	1700		

*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 (mArms) 100kHz*1	MSL	
											Reflow Temp. ≤ 260°C	Reflow Temp. ≤ 250°C
D2	6TPC330MA	6.3	85	5.0	105	330	10.0	207.9	40	1900	3	2a

*1 100k to 500kHz, 45°C