

## TPA Series

### Standard Products

Superior high frequency characteristics make capacitors in the TPA series suitable for use in noise limiters and switching power supplies.

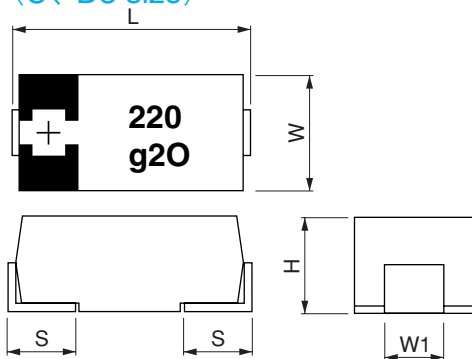
TPA series will be discontinued production in the future. Please consider the following replacements for new adoption or model changes.  
TPB series(P.18 to 20) TPC series(P.14 to 16)



### Specifications

Operating temperature range (°C)			-55 to +105
Rated capacitance range (120Hz/20°C) (μF)			33 to 220
Capacitance tolerance (120Hz/20°C)			M: ±20%
Rated voltage (V.DC)			4 to 10
Dissipation Factor (D.F.) (120Hz/20°C) (%)			≤8.0
Leakage current (Rated voltage applied, after 5 minutes) (μA)			≤0.1CV
Equivalent series resistance E.S.R. (mΩmax.), (100kHz/20°C)			Please see the attached characteristics list
Impedance ratio (100kHz/+20°C)	-55°C	Z/Z20°C	1.0 to 2.0
	+105°C	Z/Z20°C	0.6 to 1.0
Endurance (105°C, 2000h, rated voltage applied)	ΔC/C	Within ±20% of the initial value	
	D.F.	≤1.5 times the initial standard	
	L.C.	≤The initial standard	
Damp heat (Steady state) (60°C, 90to95%RH, 500h, No voltage applied)	ΔC/C	Within +40%, -20% of the initial value	
	D.F.	≤1.5 times the initial standard	
	L.C.	≤3 times the initial standard	
Surge (105°C, 1000 cycles, 1kΩ, surge voltage applied)	ΔC/C	Within ±5% of the initial value	
	D.F.	≤The initial standard	
	L.C.	≤3 times the initial standard	

### Dimensions (unit: mm) (C, D3 size)



Size code	L (±0.2)	W (±0.2)	H (±0.2)	S (±0.2)	W1 (±0.1)
C	6.0	3.2	2.8	1.3	1.8
D3	7.3	4.3	3.1	1.3	2.4

### Size List

μF	RV (SV)	4.0 (5.0)	6.3 (8.0)	10 (13.0)
33				C
47			C	
100				D3
150			D3	
220		D3		

### Characteristics list

Size code	SANYO Part number	Rated Voltage (V)	Rated Capacitance (μF)	D.F. (%max.)	L.C. (μA) max./5min.	E.S.R. (mΩ max.) 100kHz/20°C	Maximum allowable ripple current (mA rms) 100kHz*
C	10TPA33M	10.0	33	8.0	33.0	100	1000
	6TPA47M	6.3	47	8.0	29.6	100	1000
D3	10TPA100M	10.0	100	8.0	100.0	80	1200
	6TPA150M	6.3	150	8.0	94.5	80	1200
	4TPA220M	4.0	220	8.0	88.0	80	1200

\*100k to 500kHz, 45°C