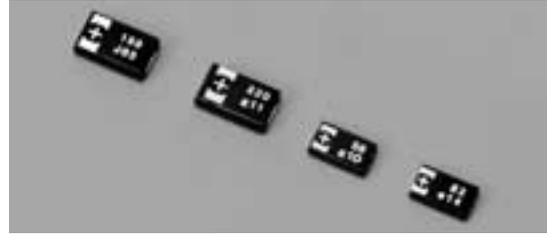


## TPC Series

### Low Profile Products

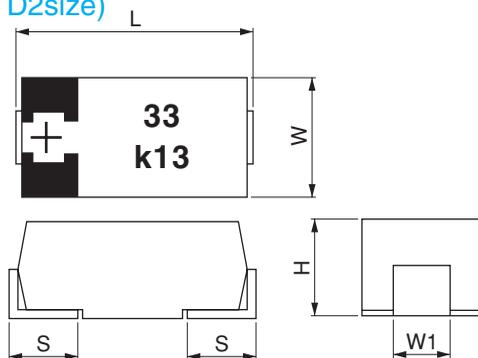
TPC series is low profile and low ESR. TPC series contributes toward miniaturization of any products.



### Specifications

Operating temperature range (°C)	-55 to +105		
Rated capacitance range (120Hz/20°C) (μF)	33 to 330		
Capacitance tolerance (120Hz/20°C)	M:±20%		
Rated voltage (V.DC)	2.5 to 16		
Dissipation Factor (D.F.) (120Hz/20°C) (%)	≤10.0		
Leakage current (Rated voltage applied, after 5 minutes) (μA)	≤0.1CV		
Equivalent series resistance ESR (mΩmax.) , (100kHz/20°C)	Please see the attached characteristics list		
Temperature characteristics of Impedance ratio (100kHz/+20°C)	-55°C	Z/Z <sub>20°C</sub>	1.0 to 2.0
	+105°C	Z/Z <sub>20°C</sub>	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 value	
	L.C.	≤The initial value	
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 value	
	L.C.	≤3 times the initial value	
Surge (105°C, 1000 cycles, 1kΩ, Surge voltage applied)	ΔC/C	Within±5% of the initial value	
	D.F.	≤The initial value	
	L.C.	≤3 times the initial value	

### Dimensions (unit: mm) (C1, D2size)



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 (V)	2.5 (3.2)	4.0 (5.0)	6.3 (8.0)	8.0 (10.0)	10.0 (13.0)	16.0 (20.0)
μF						
33				C1		D2
56		C1				
68			C1		D2	
82	C1					
100		C1	D2		D2	
150		D2	D2	D2		
220	D2	D2				
330	D2					

## TPC Series

### Characteristics list

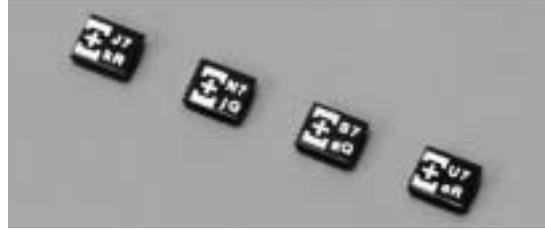
Size code	SANYO Part number	Rated Voltage (V)	Rated Capacitance (μF)	D.F. (%max.)	L.C. (μA) max./5min.	E.S.R. (mΩmax) 100kHz/20°C	Maximum allowable ripple current (mA <sub>rms</sub> ) 100kHz <sup>*1</sup>
C1	8TPC33M	8.0	33	10.0	26.4	70	1200
	6TPC68M <sup>*2</sup>	6.3	68	10.0	42.8	55	1300
	4TPC56M	4.0	56	10.0	22.4	70	1200
	4TPC100M <sup>*2</sup>	4.0	100	10.0	40.0	55	1300
	2R5TPC82M	2.5	82	10.0	20.5	70	1200
D2	16TPC33M	16.0	33	10.0	52.8	70	1400
	10TPC68M	10.0	68	10.0	68.0	45	1700
	10TPC100M	10.0	100	10.0	100.0	45	1700
	8TPC150M	8.0	150	10.0	120.0	40	1900
	6TPC100M	6.3	100	10.0	63.0	45	1700
	6TPC150M	6.3	150	10.0	94.5	40	1900
	4TPC150M	4.0	150	10.0	60.0	45	1700
	4TPC220M	4.0	220	10.0	88.0	40	1900
	2R5TPC220M	2.5	220	10.0	55.0	45	1700
	2R5TPC330M	2.5	330	10.0	82.5	40	1900

<sup>\*1</sup>:100k to 500kHz,45°C  
<sup>\*2</sup>:Under development

## TPC Series

### B1 Size Products

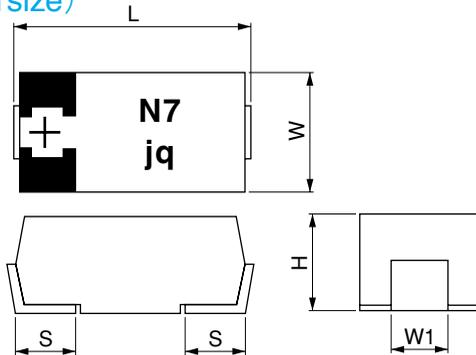
B1 size is miniaturized and low profile products of TPC series.



### Specifications

Operating Temperature range (°C)			-55 to +105
Rated capacitance range (120Hz/20°C) (μF)			10 to 56
Capacitance tolerance (120Hz/20°C)			M:±20%
Rated voltage (V.DC)			2.5 to 12.5
Dissipation Factor (D.F.) (120Hz/20°C) (%)			≤ 10.0
Leakage current (Rated voltage applied, after 5 minutes) (μA)			≤ 0.1CV
Equivalent series resistance ESR (mΩmax.), (100kHz/20°C)			Please see the attached characteristic list
Temperature characteristics of Impedance ratio (100kHz/+20°C)	-55°C	Z/Z <sub>20°C</sub>	1.0 to 2.0
	+105°C	Z/Z <sub>20°C</sub>	0.6 to 1.0
Endurance (85°C, 1000h, rated voltage applied) (105°C, 1000h, category voltage applied)	ΔC/C	Within±20% of the initial value	
	D.F.	≤ 1.5 times the initial value	
	L.C.	≤ The initial value	
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 value	
	L.C.	≤ 3 times the initial value	
Surge (85°C, 1000 cycles, 1kΩ, surge voltage applied)	ΔC/C	Within±5% of the initial value	
	D.F.	≤ The initial value	
	L.C.	≤ 3 times the initial value	

### Dimensions (unit: mm) (B1size)



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

RV (SV) μF	2.5 (3.2)	4.0 (5.0)	6.3 (8.0)	8.0 (10.0)	12.5 (16.0)
10					B1
22				B1	
33			B1		
47		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 <sub>rms</sub> ) 100kHz*1
B1	12TPC10M*2	12.5	85	10.0	105	10	10.0	12.5	80	800
	8TPC22M	8.0	85	6.3	105	22	10.0	17.6	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  
\*2:Under development