OS-CON Line-up

Guidelines and precautions for use

Series system diagram
Image of case size

Products list
Packing specifications (SMD type)
Packing specifications (Radial lead type)

Recommended soldering condition
Fundamental structure
Characteristics
Reliability

Purplemented soldering to the property of t

SVPF

SVPE SVPS SVPD SVPD SVPA SVQP SVP SEPF 86

Catalog Deletion and EOL series

POSCAP

POSCAP Line-up

Guidelines and precautions for use

guide

Selection

data

Technical

Surface mount type

Series system diagram Image of case size

Products list

Explanation of part numbers

Packing specifications

Marking

Recommended land pattern dimension Recommended soldering condition Fundamental

Characteristics
Reliability

TPU
TPH
TPG
TPSF
TPE

TPB/TPC
TPL·TPLF
TPF

TA
TV
TH
TQC

Catalog Deletion and EOL models Surface TPB/TPC Series

RoHS compliance Standard

TPB series are the standard prosucts.

TPC series are low-profile products derived from the TPB series. B2 size is the miniaturized version of TPB series.







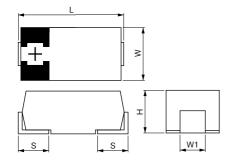




Specifications

Items	Condition	Specifications								
Rated voltage (V)	_	4.0	6.3	8.0	10	12.5				
Surge voltage (V)	_			4.6	7.2	9.2	12	14		
Category temperature range (°C)	_				-	-55 to +105	5			
Capacitance tolerance (%)	120Hz/20°C)				M: ±20				
Rated capacitance range (µF)	120Hz/20°C)				33 to 470				
Dissipation Factor (DF)	120Hz/20°C)		Plea	se see the	attached cha	aracteristics	list		
Leakage current	Rated voltage applied, af	nutes	Plea	se see the	attached cha	aracteristics	list			
Equivalent series resistance (ESR)	100kHz/+20		Please see the attached characteristics list							
Characteristics of impedance	10044-7000	-55℃	Z/Z20°C	0.6 to 2.0						
ratio at high temp. and low temp.	100kHz/20°C	+105℃	Z/Z20°C	0.6 to 2.0						
	105°C, 2,000h B2 size :105°C, 1,000h,	△C/C		Within±20% of the initial value						
Endurance	Rated voltage applied	DF		≤ 1.5 times of the initial limit						
	**Rated temp. 85°C products: 85°C, 1,000h, rated voltage applied	LC		Within the initial limit						
		△C/C		Within+40%,–20% of the initial value						
Damp heat (Steady State)	60°C, 90 to 95%RH, 500h, No-applied voltage	DF		≤ 1.5 times of the initial limit						
	The applied foliage	LC		≤ 3 times of the initial limit						
	105℃, 1,000 cycles,	△C/C		Within±5% of the initial value						
Surge	1kΩdischarge resistance, surge voltage applied	DF		Within the initial limit						
	*Rated temp. 85°C products:85°C	L	.C	≤ 3 times of the initial limit						

Dimensions



(unit:	mm
(unit.	11111

					(unit: mm)
Size code	L ±0.2%1	±0.2%1 W ±0.2		S ±0.2	W1 ±0.1
В1	3.5	2.8	1.1	0.8	2.2
B2	3.5	2.8	1.9	0.8	2.2
D2	7.3	4.3	1.9	1.3	2.4
D3L	7.3	4.3	2.8	1.3	2.4
D4	7.3	4.3	3.8	1.3	2.4

%1 ±0.3:D3L, D4 %2 ±0.2:D3L, D4

Size list

D\/	Datad	voltage
ΠV	nateu	vuitage

RV μF	4.0	6.3	8.0	10.0	12.5
10					В1
15					В1
22			В1		
33		В1		B1,B2	
47		В1		B2	
68	B2	B2		D2	
100		D2		D2	
150		D2	D2	D3L	
220		D3L		D3L,D4	
330	D3L	D2,D3L,D4		D4	
470		D4			

TPB series characteristics list

Size	Part number	Rated voltage	Rated	Rated capacitance	Category voltage	Category temperature	DF	LC (μΑ)	ESR (mΩmax)	Maximum allowable ripple current	MS Reflow	SL Reflow
code	r art number	(V)	(°C)	(μF)	(V)	(°C)	(% max)	max/5min.	100kHz/20℃	(mArms) 100kHz*1	temp. ≤ 260°C	
	10TPB47M	10	105	47	10	105	8.0	47.0	70	1100	3	3
B2	10TPB33M	10	105	33	10	105	8.0	33.0	70	1100	3	3
DZ	6ТРВ68М	6.3	105	68	6.3	105	8.0	42.8	70	1100	3	3
	4TPB68M	4.0	105	68	4.0	105	8.0	27.2	70	1100	3	3
	10TPB220ML	10	105	220	10	105	10.0	220.0	40	2000		2a
	10TPB150ML	10	105	150	10	105	10.0	150.0	40	2000	3	2a
D3L	6TPB330ML	6.3	105	330	6.3	105	10.0	207.9	40	2000	3	2a
DSL	6TPB330MAL	6.3	85	330	5.0	105	10.0	207.9	40	2000	3	2a
	6TPB220ML	6.3	105	220	6.3	105	10.0	138.6	40	2000	3	2a
	4TPB330ML	4.0	105	330	4.0	105	10.0	132.0	40	2000	3	2a
	10TPB330M	10	105	330	10	105	10.0	330.0	35	3000		2a
D4	10TPB220M	10	105	220	10	105	10.0	220.0	40	3000	3	2a
D4	6TPB470M	6.3	105	470	6.3	105	15.0	296.1	35	3000	3	2a
	6TPB330M	6.3	105	330	6.3	105	10.0	207.9	40	3000	3	2a

%1 100k to 500kHz,45℃

TPC series characteristics list

Size		Rated	Rated	Rated	Category	Category	DF	LC	ESR	Maximum allowable	MS	SL
code	Part number	voltage (V)	temperature (°C)	capacitance (µF)	voltage (V)	temperature (°C)	(% max)	(μA) max/5min.	(mΩmax) 100kHz/20°C	ripple current (mArms) 100kHz**1	Reflow temp. ≤ 260°C	Reflow temp. ≤ 250°C
	12TPC15M	12.5	85	15	10	105	10.0	18.8	80	800	3	3
	12TPC10M	12.5	85	10	10	105	10.0	12.5	80	800	3	3
B1	10TPC33MB	10	85	33	8.0	105	10.0	33.0	70	1000	3	3
ы	8TPC22M	8.0	85	22	6.3	105	10.0	17.6	70	1000	3	3
	6TPC47MB	6.3	85	47	5.0	105	10.0	29.6	70	1000	3	3
	6TPC47M	6.3	85	47	5.0	105	10.0	29.6	55	1100	3	3
	10TPC100M	10	105	100	10	105	10.0	100.0	45	1700	3	2a
	10TPC68M	10	105	68	10	105	10.0	68.0	45	1700	3	2a
D2	8TPC150M	8.0	105	150	8.0	105	10.0	120.0	40	1900	3	2a
טצ	6ТРСЗЗОМА	6.3	85	330	5.0	105	10.0	207.9	40	1900	3	2a
	6TPC150M	6.3	105	150	6.3	105	10.0	94.5	40	1900	3	2a
	6TPC100M	6.3	105	100	6.3	105	10.0	63.0	45	1700	3	2a

%1 100k to 500kHz,45℃

Guidelines and precautions for use guide Image of case size Selection Products list Technical data Fundamental structure Characteristics Reliability SVPF SVPE Surface mount type SVPS SVPD SVPC SVPB SVPA SVQP SVP type SEPF SEPC ead SEQP Radial

Catalog Deletion and EOL series

POSCAP

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> TPU TPH TPG TPSF TPE

Reliability

Surface mount type TPB/TPC TPF

TA TV TH TQC

Catalog Deletion and EOL models

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panasonic:

<u>10TPB220ML</u> <u>6TPB470M</u> <u>6TPB330M</u> <u>10TPB220M</u> <u>4TPB68M</u> <u>10TPB330M</u> <u>6TPB330MAL</u> <u>10TPB150ML</u> <u>6TPB68M</u> <u>4TPB330ML</u> <u>6TPB330ML</u> <u>10TPB47M</u> <u>10TPB330M</u>