

## Surface Mount Type

## POSCAP



### Series : TA

- ◆ This product is not intended for use in any driving application or any other critical functions that affect passenger safety. (e.g. Powertrain, ABS, Engine ECU, Airbag, etc.)  
If the intended use of TA/TV series products is for use in other automotive related applications, please contact our sales team.  
All requests are subject to approval.

### Features

- Guaranteed at 85 °C 85 %RH ● RoHS compliance, Halogen free

### Specifications

Size code	B2	D2E	D3L
Category temperature range	-55 °C to +105 °C		
Rated voltage range	4 V.DC to 10 V.DC	2.5 V.DC to 10 V.DC	
Category voltage range	4 V.DC to 10 V.DC	2.5 V.DC to 10 V.DC	
Rated capacitance range	47µF to 100 µF	68 µF to 470 µF	150 µF to 680 µF
Capacitance tolerance	±20 % (120 Hz / + 20 °C)		
Leakage current	Please see the attached characteristics list		
Dissipation factor (tan δ)	Please see the attached characteristics list		
Surge voltage (V.DC)	Rated voltage × 1.15		
Endurance	+105 °C, 2000 h, (B2 size : 1000 h) rated voltage applied		
	Capacitance change	Within ±20 % of the initial value	
	tan δ	≤ 1.5 times of the initial limit	
	DC leakage current	Within the initial limit	
Damp heat (Steady State)	+85 °C, 85 % to 90 %, 500 h, rated voltage applied		
	Capacitance change	Within +50 %, -20 % of the initial value (2R5TAE470M(F), 2R5TAE330M(F, I), 2R5TAE220M(F, 9))	
	tan δ	≤ 1.5 times of the initial limit	
	DC leakage current	Within the initial limit	

### Marking

D2E, D3L Size	B2 Size																		
<table border="1"> <tr> <th>R. Voltage (V.DC)</th> <td>2.5</td> <td>4.0</td> <td>6.3</td> <td>10.0</td> </tr> <tr> <th>Code</th> <td>e</td> <td>g</td> <td>j</td> <td>A</td> </tr> </table>	R. Voltage (V.DC)	2.5	4.0	6.3	10.0	Code	e	g	j	A	<table border="1"> <tr> <th>R. Cap. (µF)</th> <td>47</td> <td>68</td> <td>100</td> </tr> <tr> <th>Code</th> <td>S7</td> <td>W7</td> <td>A8</td> </tr> </table>	R. Cap. (µF)	47	68	100	Code	S7	W7	A8
R. Voltage (V.DC)	2.5	4.0	6.3	10.0															
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R. Cap. (µF)	47	68	100																
Code	S7	W7	A8																

### Dimensions (not to scale)

Unit : mm					
Size Code	L±0.3*1	W±0.2	H±0.2*2	S±0.2	W1±0.1
B2	3.5	2.8	1.9	0.8	2.2
D2E	7.3	4.3	1.8	1.3	2.4
D3L	7.3	4.3	2.8	1.3	2.4

\* Externals of figure are the reference.  
\* 1 ±0.2 : B2  
\* 2 ±0.1 : B2, D2E

### Characteristics list

Series	Rated voltage (V.DC)	Rated temp. (°C)	Category voltage (V.DC)	Category temp. (°C)	Rated capacitance (µF)	Case size (mm)			Size code	Specifications				Standard		Floor life			
						L	W	H		Ripple*1 (mA.r.m.s.)	ESR*2 (mΩ max.)	tan δ*3	LC*4 (µA)	Part number	Min. Packaging Qty (pcs)	Reflow Temp ≤ 260°C	Reflow Temp ≤ 250°C		
TA	2.5	105	2.5	105	220	7.3	4.3	1.8	D2E	3900	9	0.10	110.0	2R5TAE220M9	3000	3	3		
										3100	15	0.10	55.0	2R5TAE220MF	3000				
										2400	25	0.10	55.0	2R5TAE220M	3000				
						3100	15	0.10		82.5	2R5TAE330MF	3000							
						2800	18	0.10		82.5	2R5TAE330MI	3000							
						2400	25	0.10		82.5	2R5TAE330M	3000							
					470	3100	15	0.10	117.5	2R5TAE470MF	3000								
												2400	25	0.10	117.5			2R5TAE470M	3000
						2400	25	0.10	170.0	2R5TAE680ML	2500								
												3100	15	0.10	170.0			2R5TAE680MFL	2500
	680	7.3	4.3	2.8	D3L														
						1100	70	0.08	40.0	4TAB100M	2000								
												2800	18	0.10	88.0			4TAE220MI	3000
		2400	25	0.10	88.0														
						2800	18	0.10	188.0	4TAE470MIL	2500								
												2400	25	0.10	188.0			4TAE470ML	2500
	4	105	4.0	105	100														
						2800	18	0.10	88.0	4TAE220MI	3000								
												2400	25	0.10	88.0			4TAE220M	3000
		2800	18	0.10	188.0														
						2400	25	0.10	188.0	4TAE470ML	2500								
												1100	70	0.08	29.6			6TAB47M	2000
6.3	105	6.3	105	47	3.5											2.8	1.9		
						1100	70	0.08	42.8	6TAB68M	2000								
												2400	25	0.10	94.5			6TAE150M	3000
	2800	18	0.10	138.6	6TAE220MI											3000			
						2400	25	0.10	138.6	6TAE220M	3000								
												2400	25	0.10	207.9		6TAE330ML	2500	
10	105	10.0	105	47	3.5											2.8			1.9
						1100	70	0.08	47.0	10TAB47M	2000								
												2400	25	0.10	68.0		10TAE68M	3000	
	2400	25	0.10	150.0	10TAE150ML											2500			
						2400	25	0.10	220.0	10TAE220ML	2500								
												2400	25	0.10	220.0		10TAE220ML	2500	

\*1 Ripple current (100 kHz/ +45 °C), \*2 ESR (100 kHz/+20 °C) \*3 tan δ (120 Hz/+20 °C) \*4 After 5 minutes

◆ Please refer to each page in this catalog for "Reflow conditions" and "Taping specifications".

## Guidelines and precautions regarding the technical information and use of our products described in this online catalog.

- If you want to use our products described in this online catalog for applications requiring special qualities or reliability, or for applications where the failure or malfunction of the products may directly jeopardize human life or potentially cause personal injury (e.g. aircraft and aerospace equipment, traffic and transportation equipment, combustion equipment, medical equipment, accident prevention, anti-crime equipment, and/or safety equipment), it is necessary to verify whether the specifications of our products fit to such applications. Please ensure that you will ask and check with our inquiry desk as to whether the specifications of our products fit to such applications use before you use our products.
- The quality and performance of our products as described in this online catalog only apply to our products when used in isolation. Therefore, please ensure you evaluate and verify our products under the specific circumstances in which our products are assembled in your own products and in which our products will actually be used.
- If you use our products in equipment that requires a high degree of reliability, regardless of the application, it is recommended that you set up protection circuits and redundancy circuits in order to ensure safety of your equipment.
- The products and product specifications described in this online catalog are subject to change for improvement without prior notice. Therefore, please be sure to request and confirm the latest product specifications which explain the specifications of our products in detail, before you finalize the design of your applications, purchase, or use our products.
- The technical information in this online catalog provides examples of our products' typical operations and application circuits. We do not guarantee the non-infringement of third party's intellectual property rights and we do not grant any license, right, or interest in our intellectual property.
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- The switchover date for compliance with the RoHS Directive/REACH Regulations varies depending on the part number or series of our products.
- When you use the inventory of our products for which it is unclear whether those products are compliant with the RoHS Directive/REACH Regulation, please select "Sales Inquiry" in the website inquiry form and contact us.

**We do not take any responsibility for the use of our products outside the scope of the specifications, descriptions, guidelines and precautions described in this online catalog.**

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