# **Surface Mount Type**

#### series





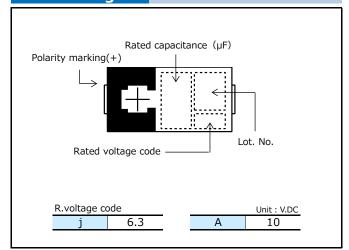
This product is not intended for use in any driving application or any other critical functions that affect passenger safety.(e.g. Powertrain, ABS, Engine ECU, Airbag, etc.) If the intended use of TA/TV series products is for use in other automotive related applications, please contact our sales team.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

#### **Features**

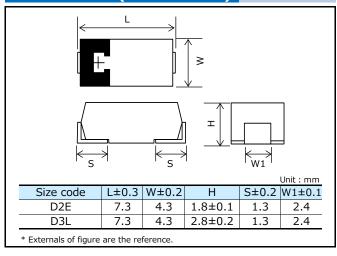
- Guaranteed at 85 ℃ 85 %RH
- Guaranteed at 125 ℃
- RoHS compliance, Halogen free

Specifications										
Size code	D2E		D3L							
Category temp. range	-55 ℃ to +125 ℃									
Rated volt. range	6.3 V.DC to	10 V.DC	10 V.DC							
Category volt. range	4.0 V.DC to (	5.3 V.DC	6.3 V.DC							
Rated cap. range	68 µF to 1	L50 μF	150 μF							
Capacitance tolerance	±20 % (120 Hz / +20 ℃)									
Leakage current	Please see the attached characteristics list									
Dissipation factor(tan $\delta$ )	Please see the attached characteristics list									
Surge voltage (V.DC)	Rated voltage × 1.15									
	+125 $^{\circ}$ C 1000 h, category voltage applied (+105 $^{\circ}$ C 2000 h, rated voltage applied)									
	Temperature	125 ℃	105 ℃							
Endurance	Capacitance change	Within ±20% of the initial valu	Within ±20% of the initial value							
	Dissipation factor(tan $\delta$ )	≤ 2 times of the initial limit	≤ 1.5 times of the initial limit							
	Leakage current	≤ 2 times of the initial limit	Within the initial limit							
	+85~°C, $85~$ % to $90~$ %, $500~$ h, rated voltage applied									
Damp heat	Capacitance change Within +40 %, -20 % of the initial value									
(Steady State)	Dissipation factor(tan $\delta$ )	≤ 1.5 times of the initial limit								
	Leakage current	eakage current Within the initial limit								

## **Marking**



# **Dimensions (not to scale)**



## **Characteristics list**

Rated volt. (V.DC)	Rated temp.	Cate-	Cate-	Rated cap. (µF)	Case size (mm)			Specifications			Standard			Floor life level		
		gory volt. (V.DC)	gory temp. (℃)		L	W	Η	code	Ripple*1 current (mA r.m.s.)	ESR <sup>*2</sup> (mΩ max.)	tan $\delta^{*3}$	LC <sup>*4</sup> (μΑ)	Part number	Min. packaging q'ty (pcs)	temp	temp
6.3	105	4.0	125	150	7.3	4.3	1.8	D2E	2400	25	0.10	94.5	6TVE150M	3000		
10	105	6.3	125	68	7.3	4.3	1.8	DZE	2400	25	0.10	68.0	10TVE68M	3000	5	3
10	105	6.3	125	150	7.3	4.3	2.8	D3L	2400	25	0.10	150.0	10TVE150ML	2500		

- \*1: Ripple current (100 kHz / +45  $^{\circ}$ C) \*2: ESR (100 kHz / +20  $^{\circ}$ C) \*3:  $\tan \delta$  (120 Hz / +20 °C)
- ◆ Please refer to each page in this catarog for "Reflow conditions", "Taping specifications" and "Floor life level".



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- 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.
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# < Regarding the Certificate of Compliance with the EU RoHS Directive/REACH Regulations>

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- 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.

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