

# Surface mount type

## TV Series

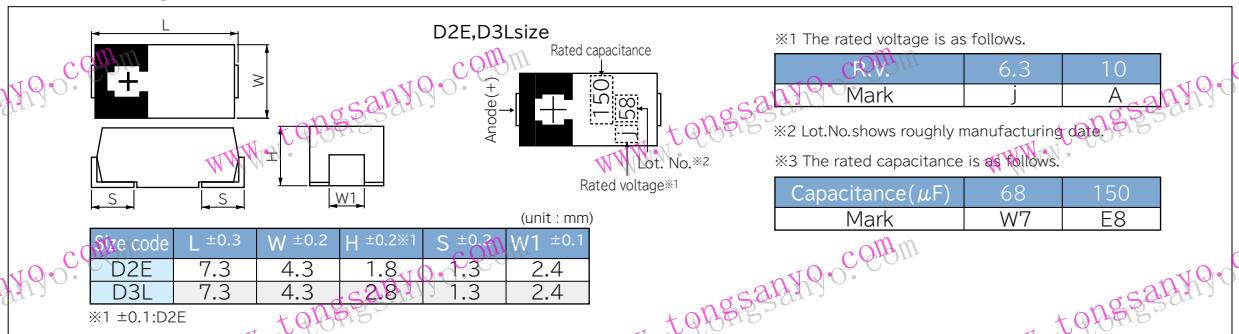


RoHS compliance, Halogen free  
High reliability: 85°C 85%RH rated voltage applied (warranty)  
higher thermal resistance, 125°C guaranteed (ambient temperature)  
Power supply circuit of entertainment equipment for the car.

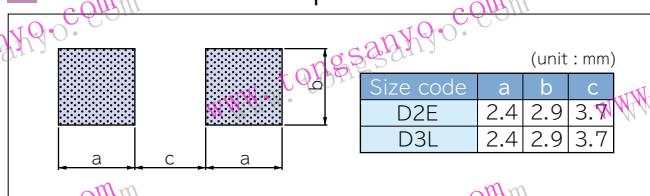
### Specifications

Items	Condition	Specifications	
Rated voltage (V)	—	6.3	10
Surge voltage (V)	—	7.2	12
Category temperature range (°C)	—	-55 to +125	
Capacitance tolerance (%)	120Hz/20°C	M : ±20	
Rated capacitance range ( $\mu$ F)	120Hz/20°C	68 to 150	
Dissipation Factor (DF)	120Hz/20°C	Please see the attached characteristics list	
Leakage current	Rated voltage applied, after 5 minutes	Please see the attached characteristics list	
Equivalent series resistance (ESR)	100kHz/20°C	Please see the attached characteristics list	
Characteristics of impedance ratio at high temp. and low temp.	100kHz/+20°C +105°C Z/Z <sub>20°C</sub>	0.6 to 2.0 0.6 to 2.0	
Endurance	125°C, 1,000h, category voltage applied (105°C 1000h, rated voltage applied)	temp 125 ΔC/C Within ±20% of the initial value DF ≤ 2 times of the initial limit LC ≤ 2 times of the initial limit Within the initial limit	105 Within ±20% of the initial value ≤ 1.5 times of the initial limit Within the initial limit
Damp heat (Load)	85°C, 85 to 90%RH, 500h, rated voltage applied	ΔC/C Within +40%, -20% of the initial value DF ≤ 1.5 times of the initial limit LC Within the initial limit	
Surge	105°C, 1,000 cycles, 1kΩ discharge resistance, surge voltage applied	ΔC/C Within ±5% of the initial value DF Within the initial limit LC ≤ 3 times of the initial limit	

### Marking and dimensions



### Recommended land pattern dimension of PWB



### Size list RV:Rated voltage

RV	6.3	10.0
68		D2E
150	D2E	D3L

### TV series characteristics list

Size code	Part number	Rated voltage (V)	Rated temperature (°C)	Rated capacitance ( $\mu$ F)	Category voltage (V)	Category temperature (°C)	DF (% max)	LC (mA) max/5min.	ESR (mΩmax) 100kHz/20°C	Maximum allowable ripple current (mA rms) 100kHz <sup>※1</sup>	MSL
D2E	10TVE68M	10	105	68	6.3	125	10	68.0	25	2400	5
	6TVE150M	10	105	150	4.0	125	10	94.5	25	2400	5
D3L	10TVE150ML	10	105	150	6.3	125	10	150.0	25	2400	5
											3

※1 100k to 500kHz, 45°C

OSCON  
OS-CON  
Line-up

Guidelines and  
precautions

Selection guide

Technical data

Surface mount type

Radial lead type

Catalog Deletion and  
EOL series

POSCAP

POSCAP  
Line-up

Guidelines and  
precautions

Series system  
diagram

Image of  
case size

Products list

Explanation of  
numbers

Packing  
specifications

Recommended  
soldering  
condition

Fundamental  
structure

Characteristics

Reliability

TPU

TPH

TPG

TPSF

TPA

TPB

TPC

TPF

TA

TV

TQF

TQC

Catalog Deletion and  
EOL models