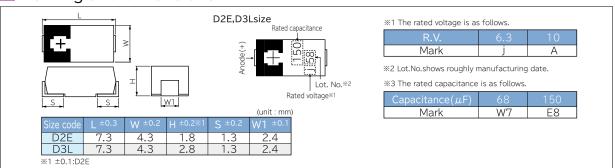
RoHS compliance, Halogen free

High reliability: 85°C85%RH rated voltage applied (warranty) higher thermal resistance: 125°C guaranteed (ambient temperature) Power supply circuit of entertainment equipment for the car.

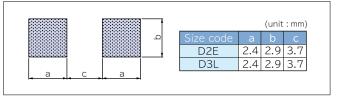
## Specifications

| Items  | Condition   |             |  | Specifications  |                                  |  |  |
|--|---|-------------|--|---|----------------------------------|--|--|
| Rated voltage (V)  | _   |             |  | 6.3   | 10                               |  |  |
| Surge voltage (V)  | -   |             |  | 7.2   | 12                               |  |  |
| Category temperature range(℃)                                  | -   |             |  | −55 to +125   |                                  |  |  |
| Capacitance tolerance (%)                                      | 120Hz/20℃   |             |  | M: ±20  |                                  |  |  |
| Rated capacitance range ( $\mu$ F)                             | 120Hz/20℃   |             | 68 to 150                                    |   |                                  |  |  |
| Dissipation Factor (DF)  | 120Hz/20℃   |             | 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°  | С           |  | Please see the attached characteristics list            |                                  |  |  |
| Characteristics of impedance ratio at high temp. and low temp. | 100kHz/+20℃   | -55℃ Z/Z20℃ |  | 0.6 to 2.0  |                                  |  |  |
| ratio at high temp, and low temp.                              | high temp. and low temp.  |             | Z/Z20°C                                      | 0.6 to 2.0  |                                  |  |  |
|  | 125°C, 1,000h,<br>category voltage applied<br>(105°C 2,000h, rated voltage applied) | temp        |  | 125   | 105                              |  |  |
| Endurance  |   | △C/C        |  | Within±20% of the initial value                         | Within±20% of the initial value  |  |  |
|  |   | DF          |  | ≤ 2 times of the initial limit                          | ≤ 1.5 times of the initial limit |  |  |
|  | Стана при                                       | LC          |  | ≤ 2 times of the initial limit   Within the initial lim |                                  |  |  |
|  | 05°C 05 +0 00% BU 500b  | ∆C/C        |  | Within+40%,-20% of the initial value                    |                                  |  |  |
| Damp heat(Load)  | 85°C, 85 to 90%RH, 500h, rated voltage applied                                      | DF          |  | ≤ 1.5 times of the initial limit                        |                                  |  |  |
|  | rated voltage applied   | LC          |  | Within the initial limit                                |                                  |  |  |
|  | 105℃, 1,000 cycles,<br>1kΩ discharge resistance,                                    | ∆C/C        |  | Within±5% of the initial value                          |                                  |  |  |
| Surge  | 1kΩ discharge resistance,   | DF          |  | Within the initial limit                                |                                  |  |  |
|  | surge voltage applied   | LC          |  | ≤ 3 times of the initial limit                          |                                  |  |  |

## Marking and dimensions



# Recommended land pattern dimension of PWB



# Size list RV:Rated voltage

| RV<br>μF | 6.3 | 10.0 |
|----------|-----|------|
| 68       |     | D2E  |
| 150      | D2E | D3L  |

#### TV series characteristics list

| Size<br>code | Part number | Rated<br>voltage<br>(V) | Rated temperature (°C) | Rated capacitance (µF) |     | Category temperature (°C) |    |       | ESR<br>(mΩmax)<br>100kHz/20℃ | Maximum allowable ripple current (mArms) 100kHz <sup>*1</sup> | M:<br>Reflow<br>temp.<br>≤ 260°C | SL<br>Reflow<br>temp.<br>≤ 250°C |
|--------------|-------------|-------------------------|------------------------|------------------------|-----|---------------------------|----|-------|------------------------------|---|----------------------------------|----------------------------------|
| D25          | 10TVE68M    | 10                      | 105                    | 68                     | 6.3 | 125                       | 10 | 68.0  | 25                           | 2400  | 5                                | 3                                |
| D2E          | 6TVE150M    | 6.3                     | 105                    | 150                    | 4.0 | 125                       | 10 | 94.5  | 25                           | 2400  | 5                                | 3                                |
| D3L          | 10TVE150ML  | 10                      | 105                    | 150                    | 6.3 | 125                       | 10 | 150.0 | 25                           | 2400  | 5                                | 3                                |

%1 100k to 500kHz,45℃



Radial lead type

Catalog Deletion and EOL series



| Technical data | Recommended<br>soldering<br>condition |
|----------------|---------------------------------------|
|                | Fundamenta<br>structure               |
|                | Characteristics                       |
|                | Reliability                           |
|                |                                       |
|                | TPU                                   |

| Tec               | Reliabili |
|-------------------|-----------|
|                   | TPU       |
|                   | TPH       |
|                   | TPG       |
| ırface mount type | TPSF      |
|                   | TPE       |
|                   | TPB       |
|                   | TPC       |
|                   | TPF       |
| S                 | ТΔ        |

TQC

Catalog Deletion and EOL models

TH