

## 5DL2C48A, 5FL2C48A, U5DL2C48A, U5FL2C48A

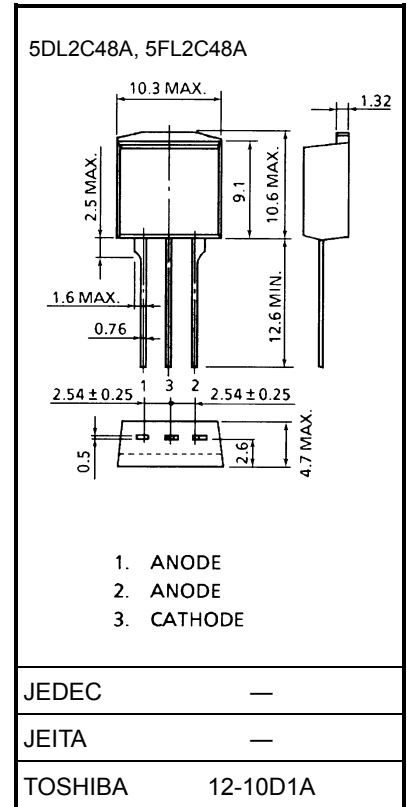
Switching Mode Power Supply Application  
Converter & Chopper Application

- Repetitive peak reverse voltage:  $V_{DRM} = 200, 300 \text{ V}$
- Average output rectified current:  $I_O = 5 \text{ A}$
- Ultra fast reverse-recovery time:  $t_{rr} = 35 \text{ ns (Max)}$
- Low switching losses and output noise

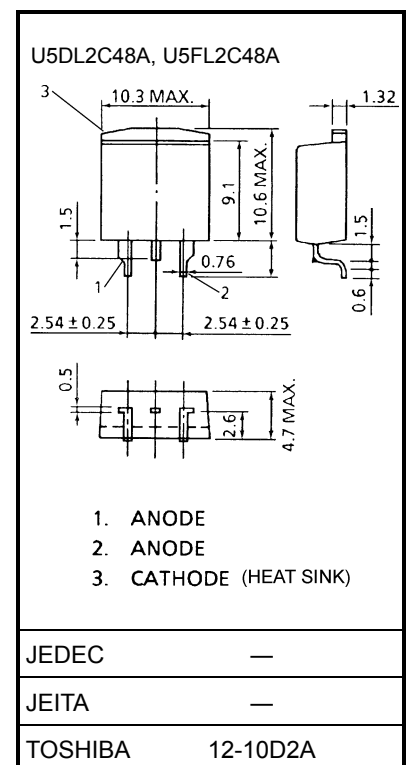
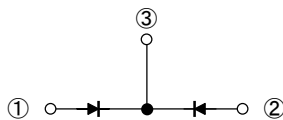
### Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Characteristics                       |           | Symbol           | Rating       | Unit |
|---------------------------------------|-----------|------------------|--------------|------|
| Repetitive peak<br>Repetitive voltage | 5DL2C48A  | V <sub>RRM</sub> | 200          | V    |
|                                       | U5DL2C48A |                  |              |      |
|                                       | 5FL2C48A  |                  |              |      |
|                                       | U5FL2C48A |                  |              |      |
| Average output rectified current      |           | I <sub>O</sub>   | 5            | A    |
| Peak one cycle surge forward current  |           | I <sub>FSM</sub> | 25 (50 Hz)   | A    |
|                                       |           |                  | 27.5 (60 Hz) |      |
| Junction temperature                  |           | T <sub>j</sub>   | −40~150      | °C   |
| Storage temperature range             |           | T <sub>stg</sub> | −40~150      | °C   |

Unit: mm



### Polarity

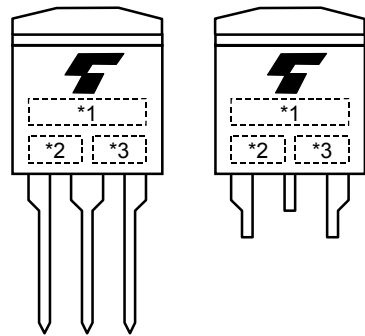


Electrical Characteristics (Ta = 25°C)

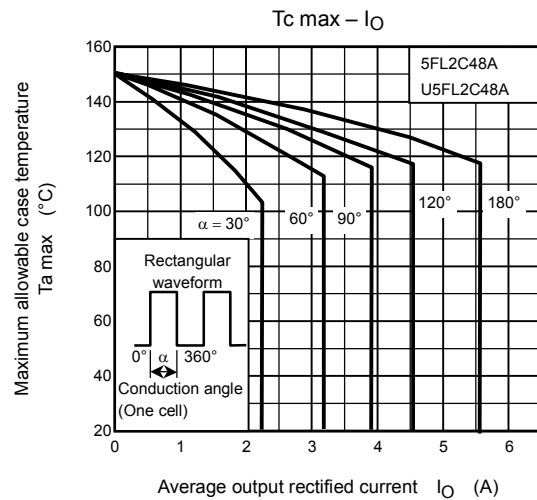
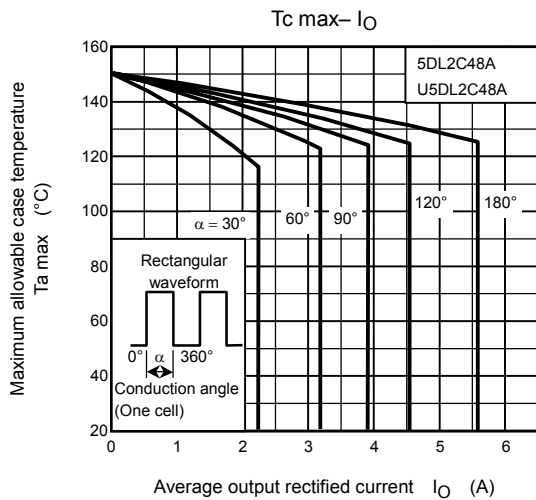
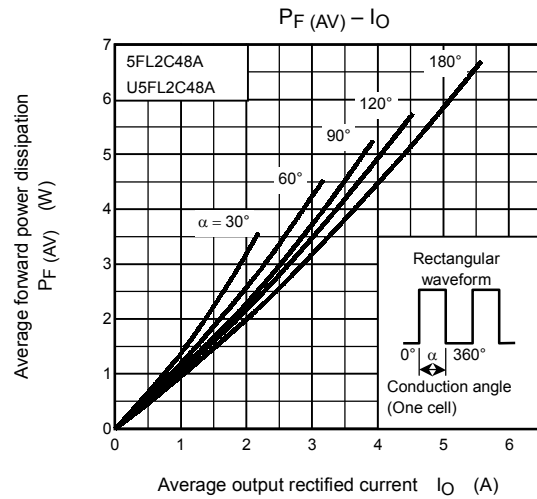
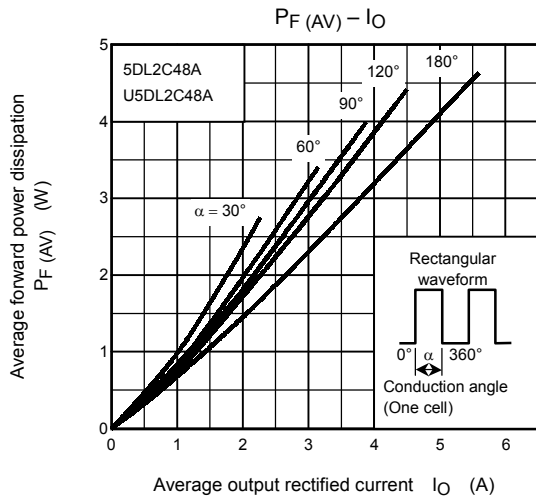
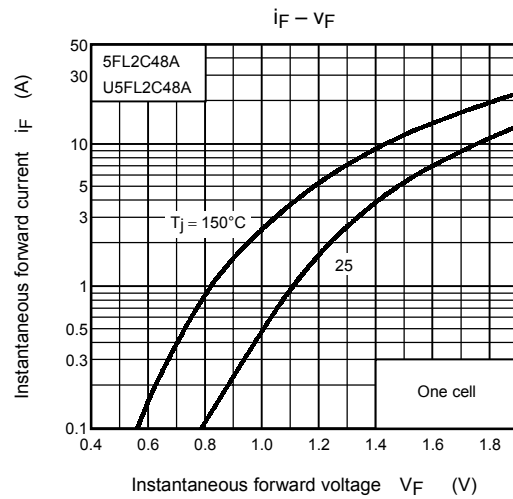
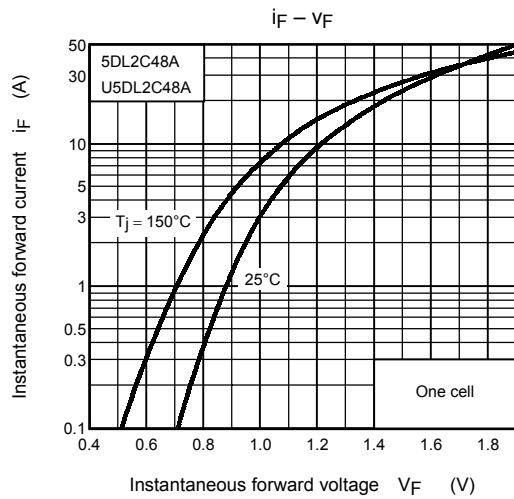
| Characteristics                 |           | Symbol               | Test Condition                         | Typ. | Max  | Unit |
|---------------------------------|-----------|----------------------|----------------------------------------|------|------|------|
| Peak forward voltage            | 5DL2C48A  | V <sub>FM</sub>      | I <sub>FM</sub> = 2.5 A                | —    | 0.98 | V    |
|                                 | U5DL2C48A |                      |                                        |      |      |      |
|                                 | 5FL2C48A  |                      |                                        | —    | 1.3  |      |
|                                 | U5FL2C48A |                      |                                        |      |      |      |
| Repetitive peak reverse current |           | I <sub>RRM</sub>     | V <sub>RRM</sub> = Rated               | —    | 10   | μA   |
| Reverse recovery time           |           | t <sub>rr</sub>      | I <sub>F</sub> = 2 A, di/dt = -20 A/μs | —    | 35   | ns   |
| Forward recovery time           |           | t <sub>fr</sub>      | I <sub>F</sub> = 1 A                   |      | 100  | ns   |
| Thermal resistance              |           | R <sub>th(j-c)</sub> | DC total, junction to case             | —    | 3.5  | °C/W |

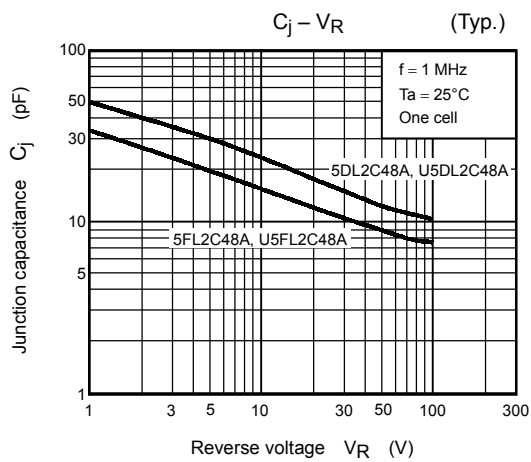
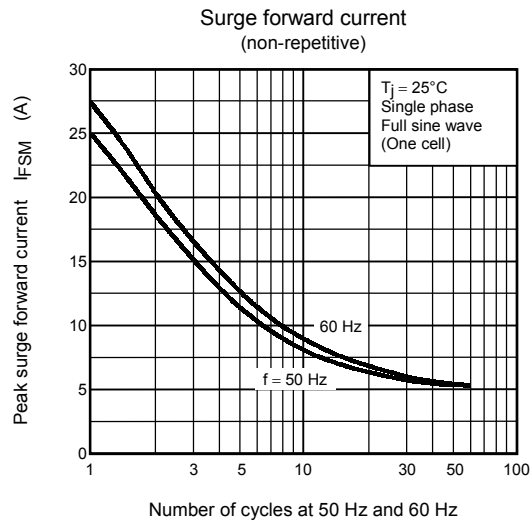
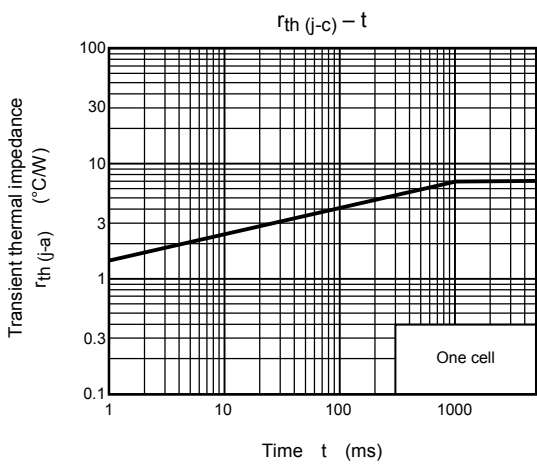
V<sub>FM</sub>, I<sub>RRM</sub>, t<sub>rr</sub>, t<sub>fr</sub>: A Value of one cell.

Marking



|    |                                                                                                                                                                                                                                                                                                       |       |      |                     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|---------------------|
| *1 | Mark                                                                                                                                                                                                                                                                                                  | 5DL2C | Type | 5DL2C48A, U5DL2C48A |
|    |                                                                                                                                                                                                                                                                                                       | 5FL2C |      | 5FL2C48A, U5FL2C48A |
| *2 | A                                                                                                                                                                                                                                                                                                     |       |      |                     |
| *3 | <div>Lot number</div> <div><div><div><div></div><div></div></div><div>Month of manufacture</div><div>(January to December are denoted by letter A to L respectively.)</div></div><div><div></div><div>Year of manufacture</div><div>(Last decimal digit of the year of manufacture)</div></div></div> |       |      |                     |





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