

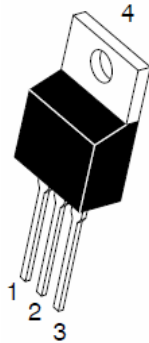
# TSR10L100CT-S

# TSR10L100CTF-S

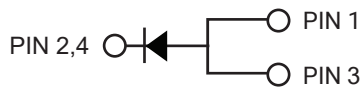
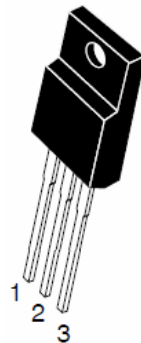
16-Nov-2021

## Trench MOS Barrier Schottky Rectifier

**TO-220AB**  
**TSR10L100CT-S**



**ITO-220AB**  
**TSR10L100CTF-S**



### Features

- Advanced trench technology
- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

### Applications

- DC/DC Converters
- AC/DC Adaptors
- Switching Power Supplies
- Freewheeling Diodes

### Maximum ratings and electrical characteristics (T<sub>J</sub> = 25°C unless otherwise noted)

| Parameter                                                                                     |        |            | Symbol                            | Limit       |      | Unit |
|-----------------------------------------------------------------------------------------------|--------|------------|-----------------------------------|-------------|------|------|
| Maximum repetitive peak reverse voltage                                                       |        |            | VRRM                              | 100         |      | V    |
| Maximum average forward rectified current                                                     |        | per device | IF(AV)                            | 10          |      | A    |
| Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode |        |            | IFSM                              | 160         |      | A    |
| Operating junction and storage temperature range                                              |        |            | T <sub>J</sub> , T <sub>STG</sub> | -55 to +150 |      | °C   |
| Typical thermal resistance per leg                                                            |        | TO-220AB   | R <sub>θJC</sub>                  | 2           |      | °C/W |
|                                                                                               |        | ITO-220AB  |                                   | 4           |      | °C/W |
| Instantaneous forward voltage per diode                                                       |        |            | VF(1)                             | TYP.        | MAX. | V    |
|                                                                                               | IF=2A  | TJ=25°C    |                                   | 0.44        | 0.50 |      |
|                                                                                               | IF=2A  | TJ=125°C   |                                   | 0.39        | -    |      |
|                                                                                               | IF=10A | TJ=25°C    |                                   | 0.63        | 0.70 |      |
|                                                                                               | IF=10A | TJ=125°C   |                                   | 0.58        | -    |      |
| Instantaneous reverse current per diode at rated reverse voltage                              |        | TJ=25°C    | IR(2)                             | -           | 50   | uA   |
|                                                                                               |        | TJ=125°C   |                                   | -           | 10   | mA   |

Notes:

(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

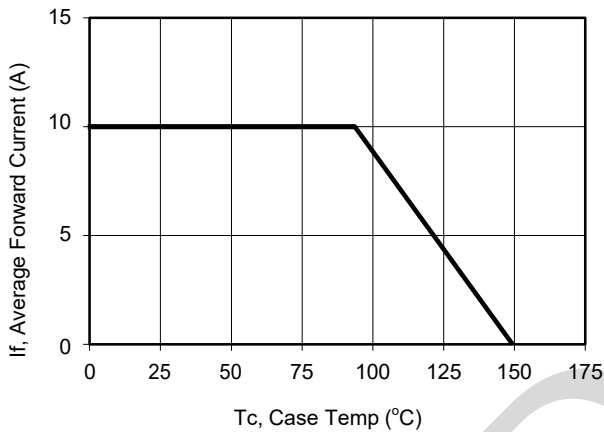
# TSR10L100CT-S

# TSR10L100CTF-S

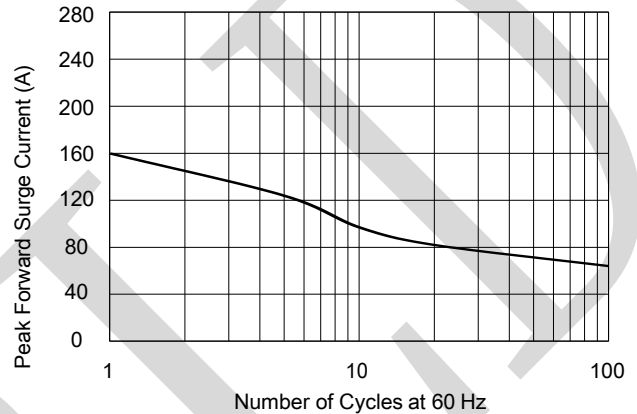
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## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

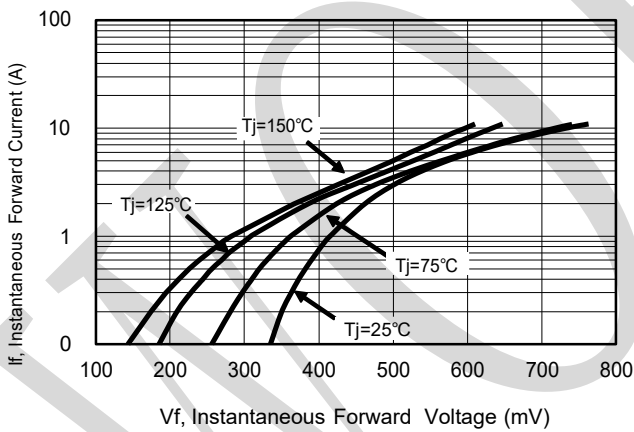
**Current Derating, Case**



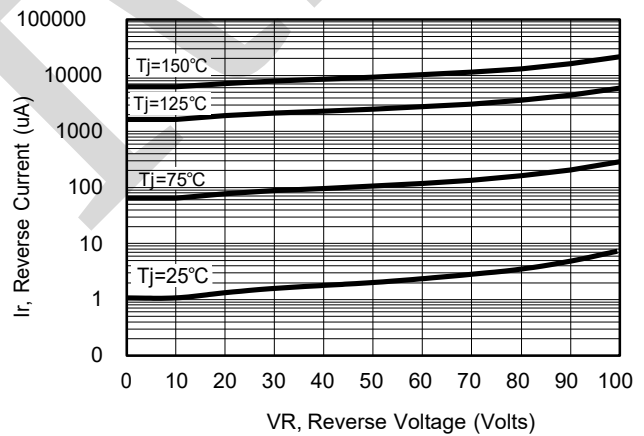
**Maximum Repetitive Surge Current**



**Typical Forward Voltage**



**Typical Reverse Current**



# TSR10L100CT-S

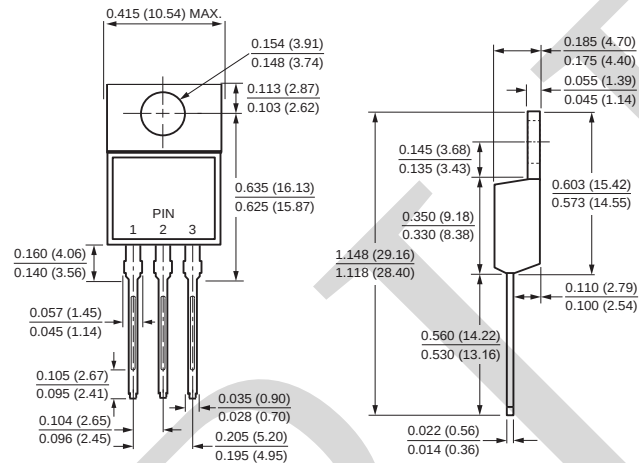
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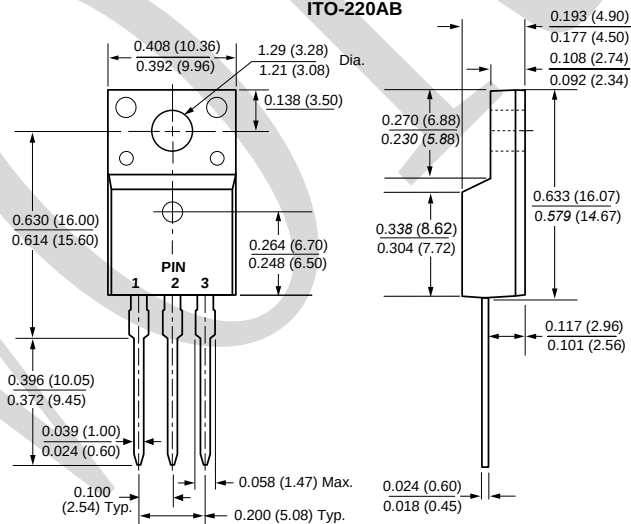
## PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

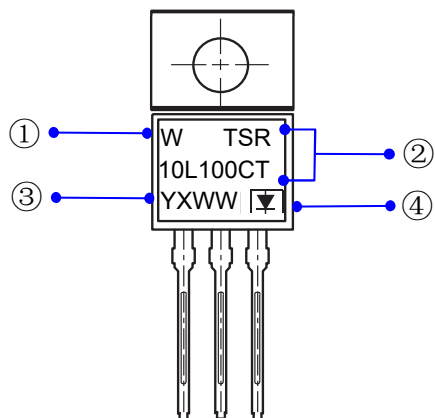
TO-220AB



ITO-220AB



## Marking Information



- ①W : Company's trademark  
 ②Product model : TSR10L100CT or TSR10L100CTF  
 ③PDC information :

Y X WW

WW:Week code(01 to 53)

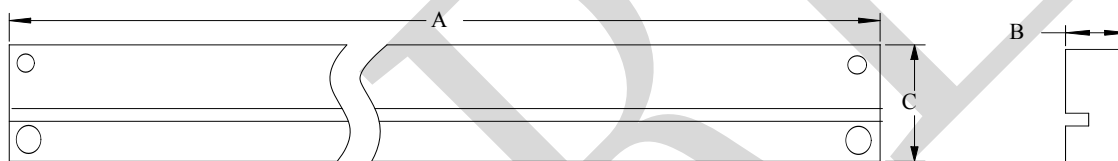
X:Internal identification code

Y:Year code(ex:0=2020)

- ④  Single wafer

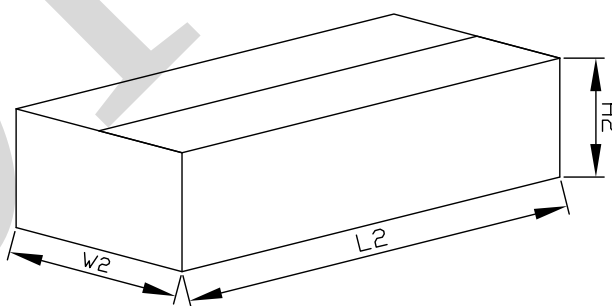
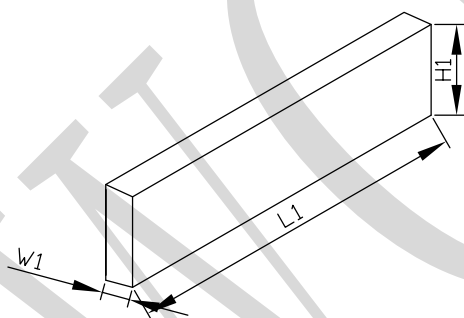
## Packaging Information

### 1.Tube Dimensions



### 2. Inside Box

### 3. Outside Box



## Packaging Information

| NO   | UNIT                                                          | Tube Dimensions |   |    | Inside Box                                    |    |     | Outside Box                      |     |     |
|------|---------------------------------------------------------------|-----------------|---|----|-----------------------------------------------|----|-----|----------------------------------|-----|-----|
| Size | mm                                                            | A               | B | C  | L1                                            | W1 | H1  | L2                               | W2  | H2  |
|      |                                                               | 530             | 7 | 33 | 570                                           | 46 | 150 | 590                              | 260 | 180 |
| QTY  | PCS                                                           | 50PCS/Tube      |   |    | Smallest package,1000PCS,<br>20 tube in total |    |     | 5,000PCS/carton,5 boxes in total |     |     |
| Note | Tolerance    ≤20mm,±3mm;    21-100mm,±5mm;    101-500mm,±10mm |                 |   |    |                                               |    |     |                                  |     |     |