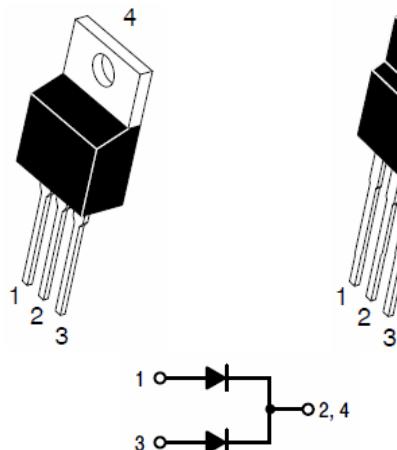
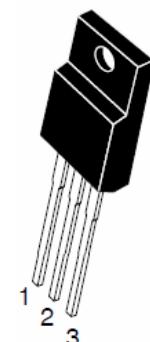


Trench MOS Barrier Schottky Rectifier

TO-220AB
TSR20L200CT



ITO-220AB
TSR20L200CTF



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 ($T_J = 25^\circ\text{C}$ unless otherwise noted)

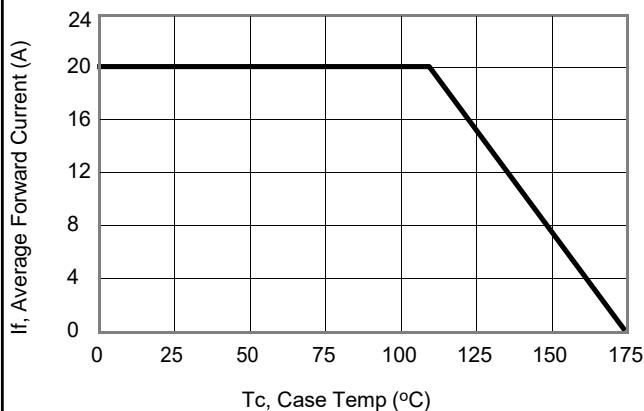
| Parameter | Symbol | Limit | | Unit |
|--|--------------------------------|---------------------------|------|---------------------------|
| Maximum repetitive peak reverse voltage | VRRM | 200 | | V |
| Maximum average forward rectified current | device | IF(AV) | 20 | A |
| | per diode | | 10 | |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode | IFSM | 220 | | A |
| Operating junction and storage temperature range | T_J , TSTG | -65 to +175 | | $^\circ\text{C}$ |
| Typical thermal resistance per leg | TO-220AB | R θ J _C | 2 | $^\circ\text{C}/\text{W}$ |
| | ITO-220AB | | 4 | $^\circ\text{C}/\text{W}$ |
| Instantaneous forward voltage per diode | | VF(1) | TYP. | MAX. |
| | IF=3A $T_J=25^\circ\text{C}$ | | 0.72 | 0.78 |
| | IF=3A $T_J=125^\circ\text{C}$ | | 0.63 | - |
| | IF=10A $T_J=25^\circ\text{C}$ | | 0.81 | 0.88 |
| | IF=10A $T_J=125^\circ\text{C}$ | | 0.73 | - |
| Instantaneous reverse current per diode at rated reverse voltage | $T_J=25^\circ\text{C}$ | IR(2) | 1 | 100 μA |
| | $T_J=125^\circ\text{C}$ | | - | 10 mA |

Notes:

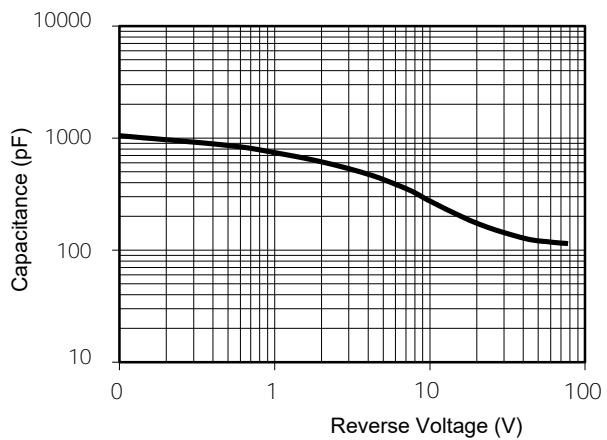
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

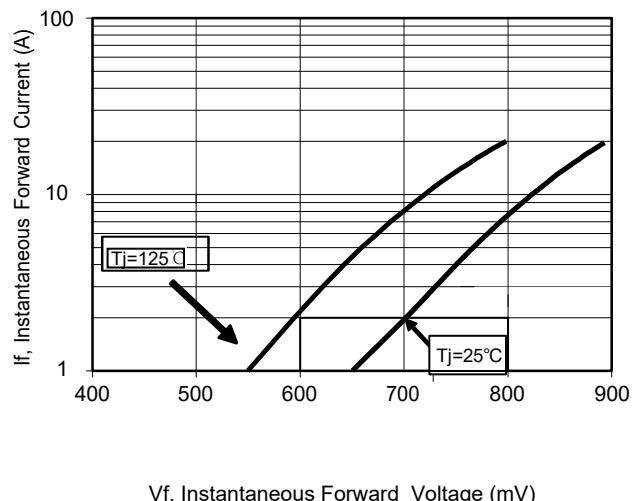
RATINGS AND CHARACTERISTICS CURVES ($T_A = 25^\circ\text{C}$ unless otherwise noted)



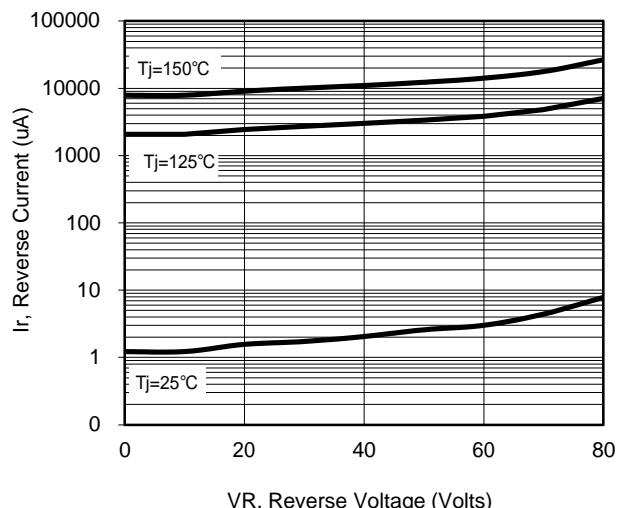
Current Derating, Case



Typical Junction Capacitance



Typical Forward Voltage



Typical Reverse Current



TSR20L200CT

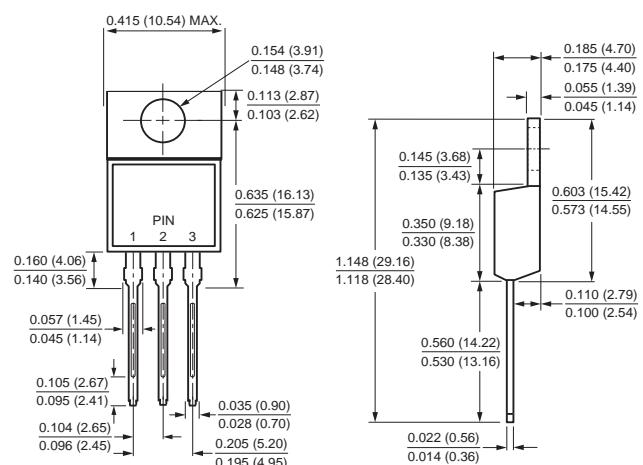
TSR20L200CTF

23-NOV-2016

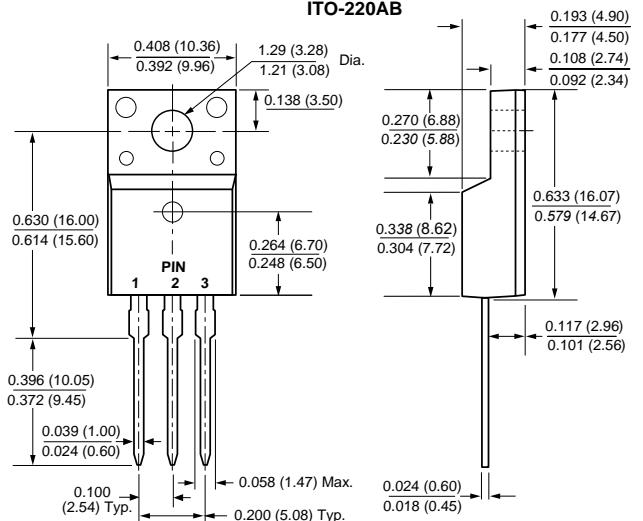
PACKAGE OUTLINE DIMENSIONS

Note: unit In(mm)

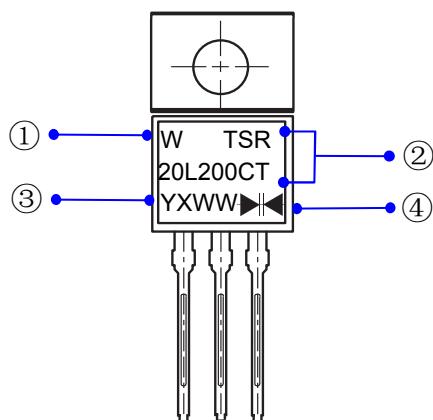
TO-220AB



ITO-220AB



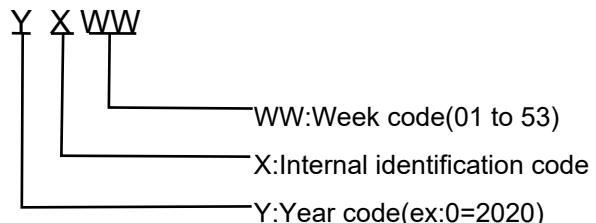
Marking Information



①W : Company's trademark

②Product model : TSR20L200CT or TSR20L200CTF

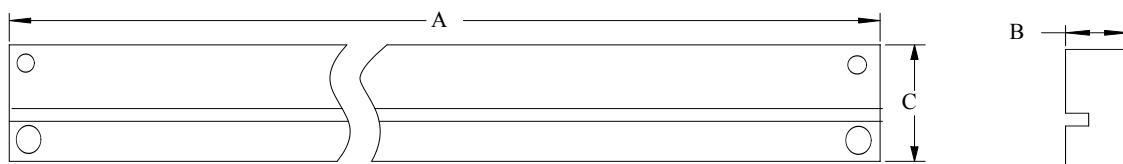
③PDC information :



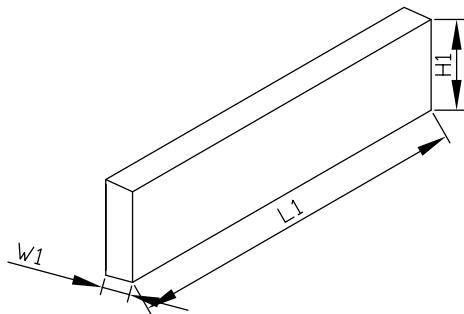
④ ►► Double wafer

Packaging Information

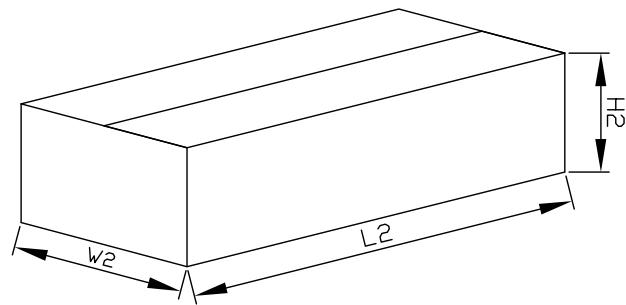
1.Tube Dimensions



2.Inside Box



3.Outside Box



Packaging Information

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