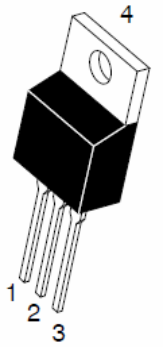
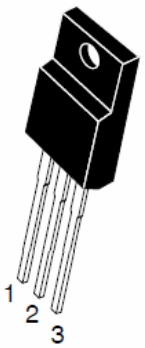
# TSR30L100CT
# TSR30L100CTF

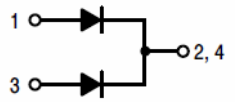
## Trench MOS Barrier Schottky Rectifier

**TO-220AB**
**TSR30L100CT**




**ITO-220AB**
**TSR30L100CTF**




### 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 (TJ = 25°C unless otherwise noted)

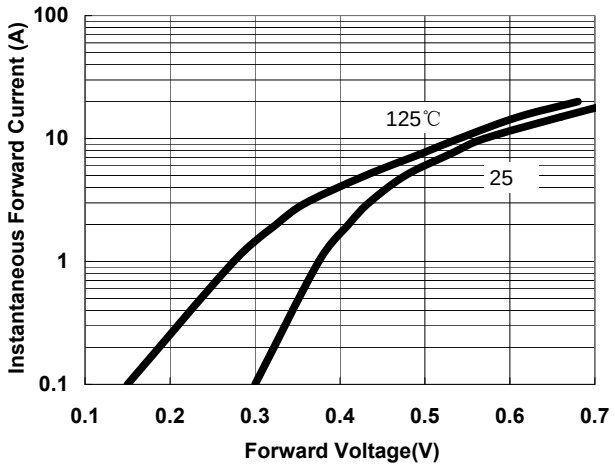
| Parameter | | | Symbol | Limit | | Unit |
|---|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | | | $V_{RRM}$ | 100 | | V |
| Maximum average forward rectified current | | per device | $I_{F(AV)}$ | 30 | | A |
| | | per diode | | 15 | | |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode | | | $I_{FSM}$ | 230 | | A |
| Operating junction and storage temperature range | | | $T_J$, $T_{STG}$ | -65 to +150 | | ℃ |
| Typical thermal resistance per leg | | TO-220AB | $R_{\Theta JC}$ | 2 | | °C/W |
| | | ITO-220AB | | 4 | | °C/W |
| | | | | TYP. | MAX. | |
| Instantaneous forward voltage per diode | $I_F$=5A | $T_J$=25°C | $V_{F(1)}$ | 0.48 | - | V |
| | $I_F$=15A | | | 0.66 | 0.72 | |
| | $I_F$=5A | $T_J$=125°C | | 0.43 | - | |
| | $I_F$=15A | | | 0.61 | - | |
| Instantaneous reverse current per diode at rated reverse voltage | | $T_J$=25°C | $I_{R(2)}$ | 20 | 70 | uA |
| | | $T_J$=125°C | | - | 50 | mA |

Notes:

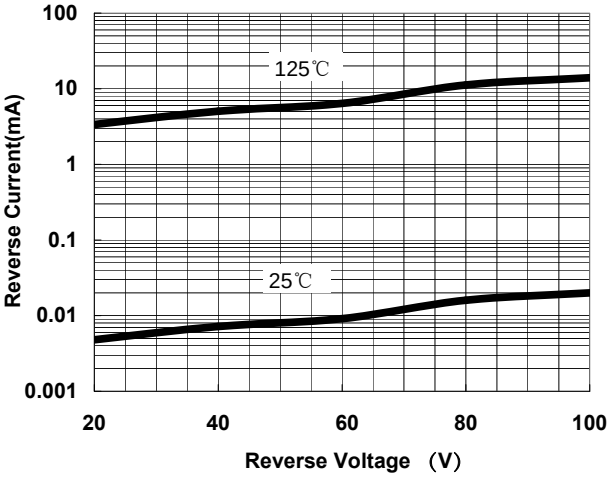
(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≦ 40 ms

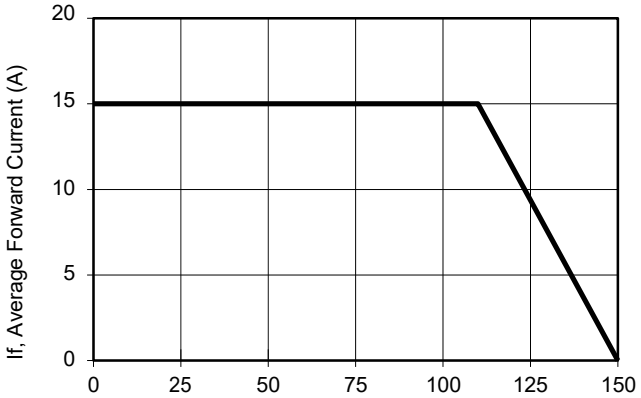
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 ℃ unless otherwise noted)



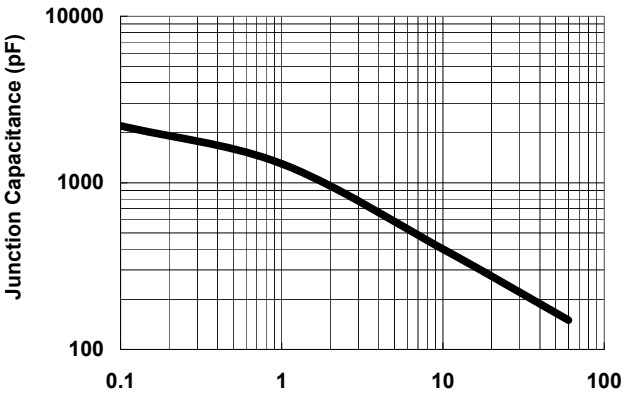

Forward Current Derating Curve




Typical Junction Capacitance Per Diode



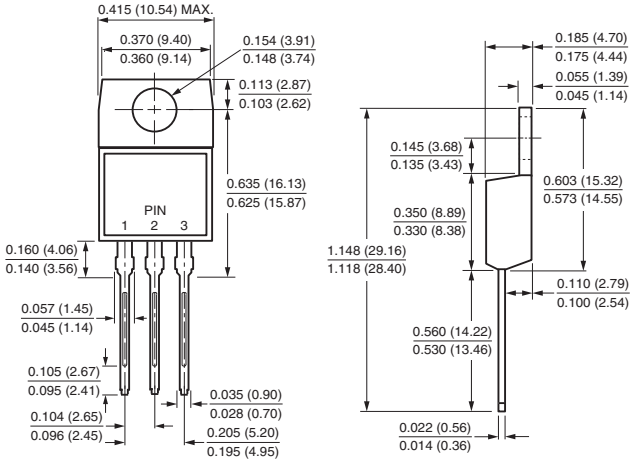

Current Derating, Case




Reverse Voltage (V)

## PACKAGE OUTLINE DIMENSIONS

**TO-220AB**




**ITO-220AB**

