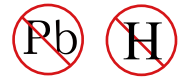




YEA SHIN TECHNOLOGY CO., LTD

EBRP10E300FCT

Excellent Schottky Barrier Rectifier
VOLTAGE - 300 Volts CURRENT - 10Amperes

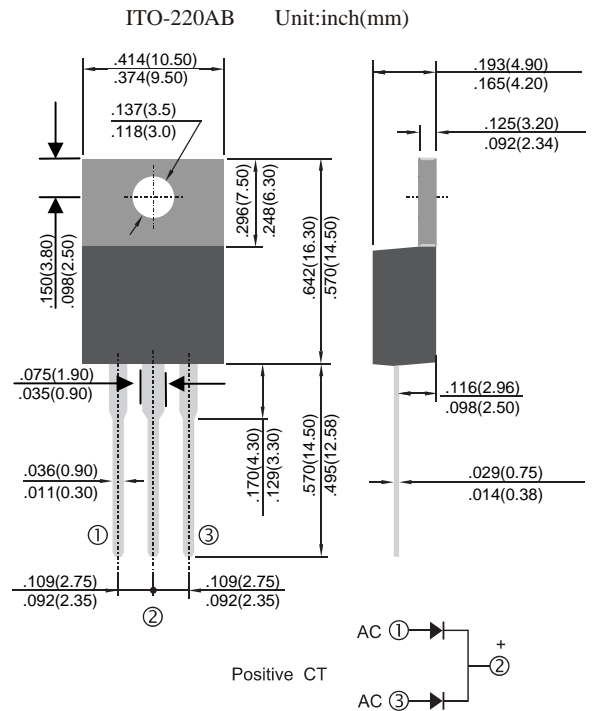


Features

- Low Forward Voltage Drop
- Excellent High Temperature Stability
- Excellent Barrier Rectifier Technology
- Soft, Fast Switching Capability

Mechanical Data

- Case: ITO-220AB
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208
- Weight: 1.645 grams (approximate)



Maximum Ratings and Electrical Characteristics (T_A=25°C unless otherwise specified)

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| PARAMETER | SYMBOL | EBRP10E300FCT | UNIT |
|---|-----------------------------------|-------------------------------------|------|
| Marking | | P10E300FCT · 10E300FCT | |
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 300 | V |
| Maximum RMS Voltage | V _{RMS} | 210 | V |
| Maximum DC Blocking Voltage | V _{DC} | 300 | V |
| Maximum Average Forward Current (Total) (Per Leg) | I _{F(AV)} | 10 5 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method) | I _{FSM} | 120 | A |
| Maximum Instantaneous Forward Voltage I _F =3A @25°C I _F =5A@25°C I _F =10A@25°C | V _F | 0.77 Typ. 0.86 Max. 0.98 Typ. | V |
| Maximum DC Reverse Current at T _A =25°C at Raged DC Blocking Voltage T _A =125°C | I _R | 0.2 5 | mA |
| Typical Junction Capacitance (Note 1) | C _J | 90 | pF |
| Typical Thermal Resistance | R _{θJC} | 3 | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | °C |

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC..

DEVICE CHARACTERISTICS

EBRP10E300FCT

FIG. 1-Typical Forward Current Derating Curve

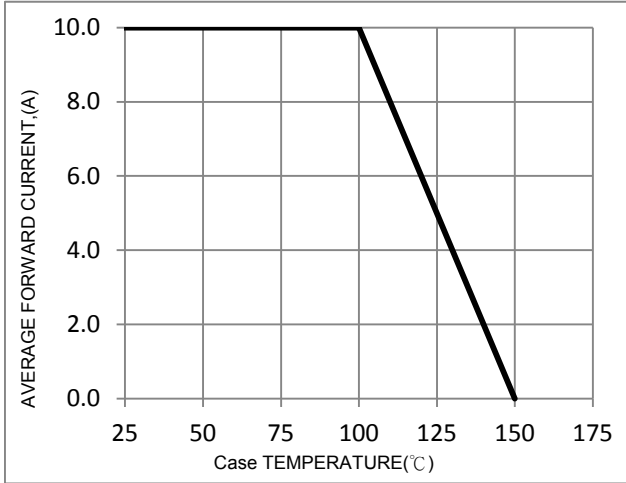


FIG. 2-Typical Forward Characteristics

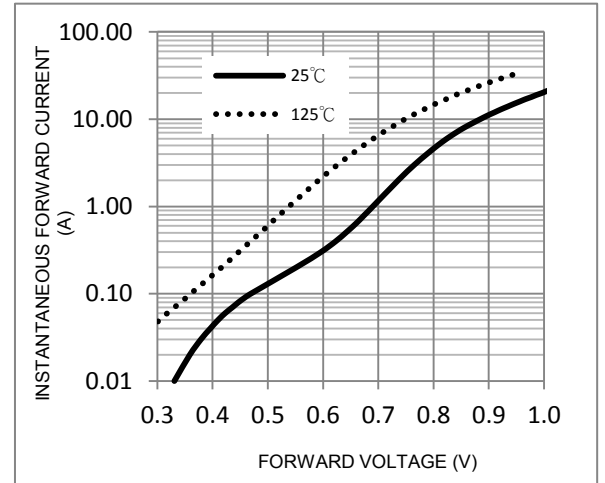


FIG. 3-Maximum Non-Repetitive Forward Surge Current

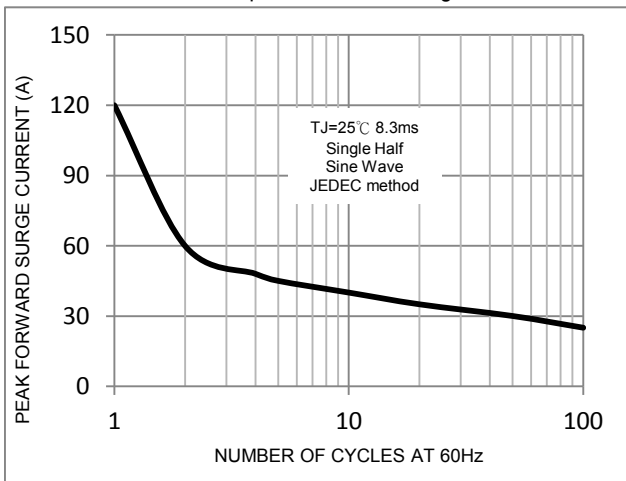


FIG. 4-Typical Reverse Characteristics

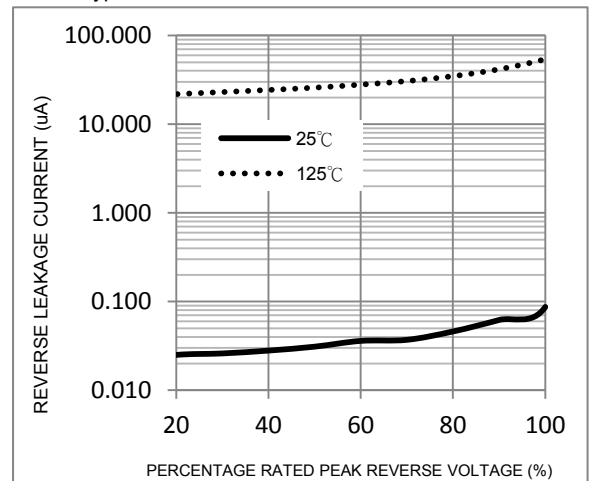


FIG. 5-Typical Junction Capacitance

