

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **30 to 150Volts**
 FORWARD CURRENT - **10.0 Amperes**

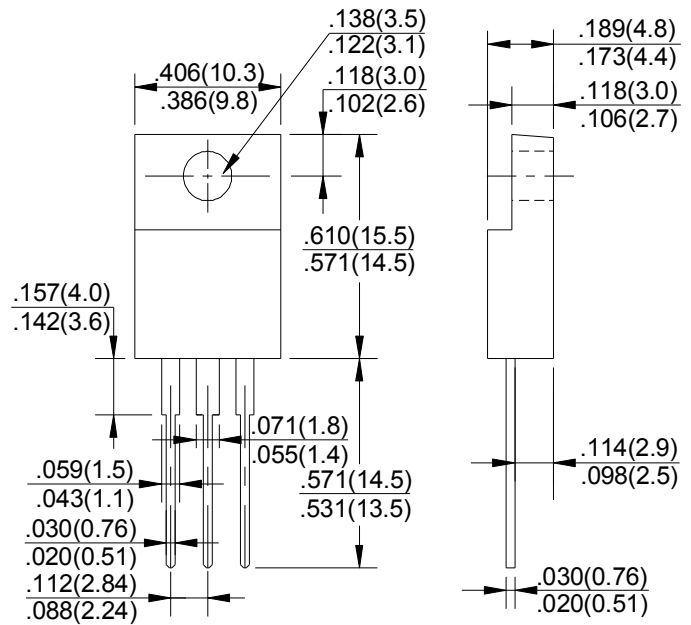
FEATURES

- Metal of silicon rectifier , majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- High current capability,low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

- Case: ITO-220AB molded plastic
- Polarity: As marked on the body
- Weight: 0.08ounces,2.24 grams
- Mounting position :Any

ITO-220AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | SRF 1030CT | SRF 1040CT | SRF 1050CT | SRF 1060CT | SRF 1080CT | SRF 10100CT | SRF 10150CT | UNIT | |
|---|--------|-------------|------------|------------|------------|------------|-------------|-------------|------|----|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 30 | 40 | 50 | 60 | 80 | 100 | 150 | V | |
| Maximum RMS Voltage | VRMS | 21 | 28 | 35 | 42 | 56 | 70 | 105 | V | |
| Maximum DC Blocking Voltage | VDC | 30 | 40 | 50 | 60 | 80 | 100 | 150 | V | |
| Maximum Average Forward Rectified Current (See Fig.1) @Tc=95 °C | I(AV) | 10.0 | | | | | | | A | |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | IFSM | 125 | | | | | | | A | |
| Peak Forward Voltage at 5.0A DC (Note1) | VF | 0.55 | | 0.70 | | 0.85 | | 0.95 | V | |
| Maximum DC Reverse Current @Tj=25°C at Rated DC Bolcking Voltage @Tj=100°C | IR | 1.0 | | | | | | | 50 | mA |
| Typical Junction Capacitance (Note2) | CJ | 250 | | | | | | | pF | |
| Typical Thermal Resistance (Note3) | RθJC | 3.0 | | | | | | | °C/W | |
| Operating Temperature Range | TJ | -55 to +125 | | | | | | | °C | |
| Storage Temperature Range | TSTG | -55 to +150 | | | | | | | °C | |

NOTES:1.300us pulse width,2% duty cycle.

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

3.Thermal resistance junction to case.

RATING AND CHARACTERISTIC CURVES
SRF1030CT thru SRF10150CT



FIG. 1 – FORWARD CURRENT DERATING CURVE

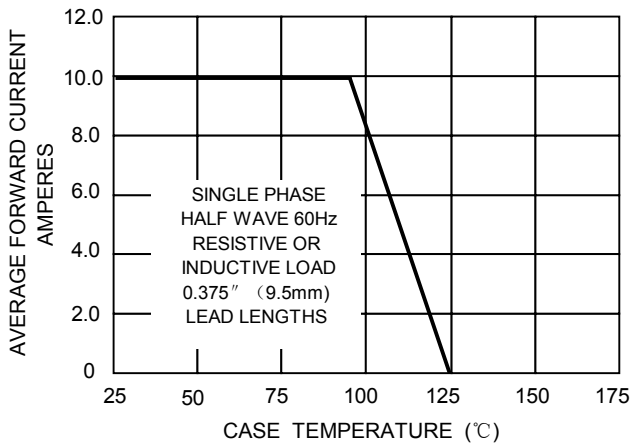


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

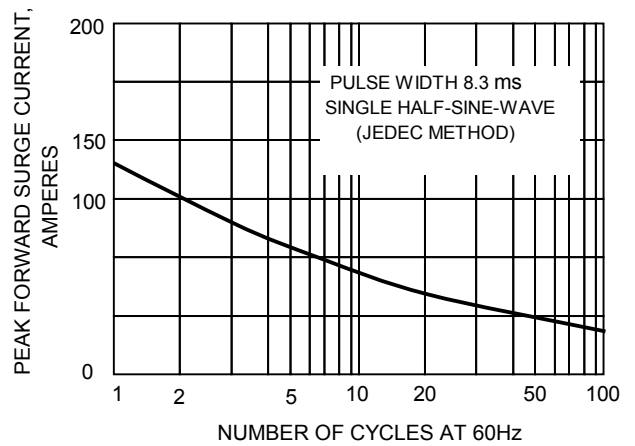


FIG.3-TYPICAL REVER CHARACTERISTICS

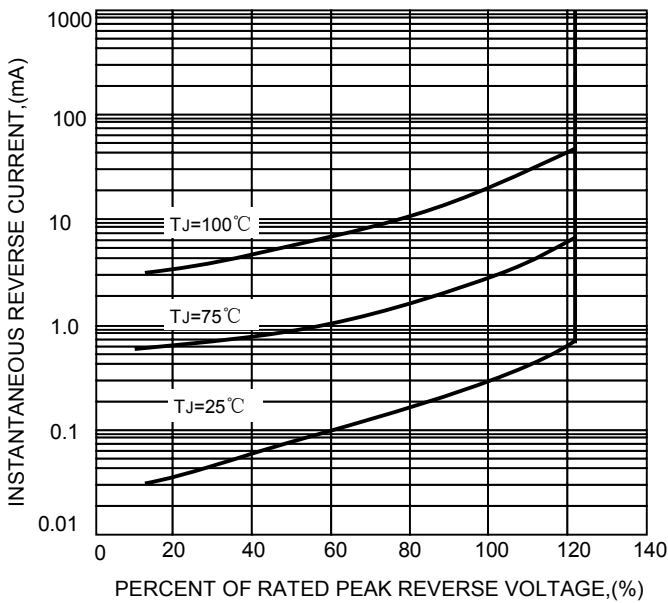


FIG.4-TYPICAL FORWARD CHARACTERISTICS

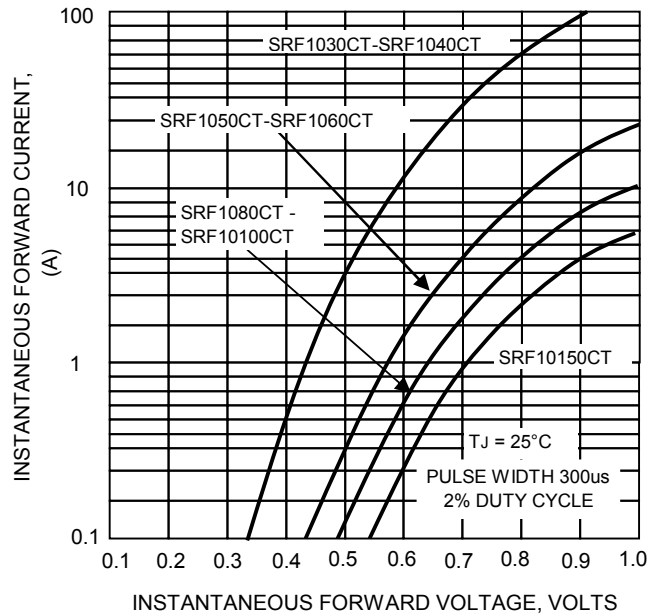


FIG.5 – TYPICAL JUNCTION CAPACITANCE

