

## SCHOTTKY BARRIER RECTIFIERS

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

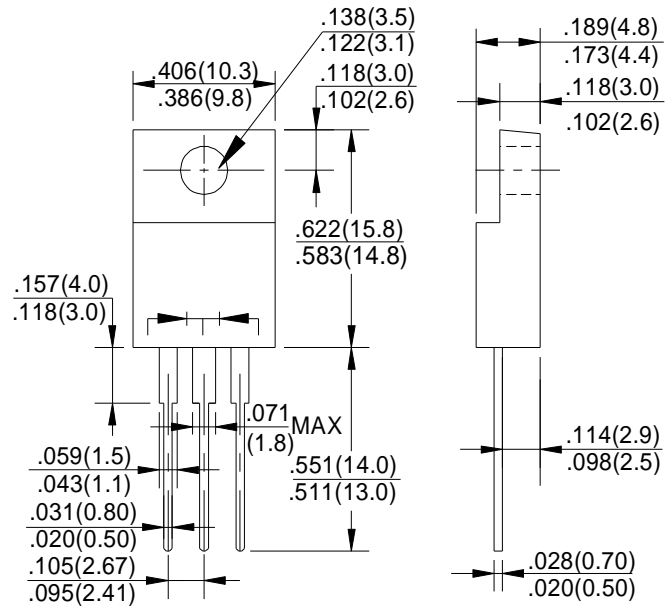
### FEATURES

- 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   | V <sub>RRM</sub>  | 30          | 40         | 50         | 60         | 80         | 100         | 150         | V    |    |
| Maximum RMS Voltage  | V <sub>RMS</sub>  | 21          | 28         | 35         | 42         | 56         | 70          | 105         | V    |    |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>   | 30          | 40         | 50         | 60         | 80         | 100         | 150         | V    |    |
| Maximum Average Forward Rectified Current ( See Fig.1) @T <sub>c</sub> =95 °C                        | I <sub>(AV)</sub> | 10.0        |            |            |            |            |             |             | A    |    |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)    | I <sub>FSM</sub>  | 120         |            |            |            |            |             |             | A    |    |
| Peak Forward Voltage at 5.0A DC (Note1)  | V <sub>F</sub>    | 0.55        | 0.70       |            | 0.85       |            | 0.95        |             | V    |    |
| Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Bolcking Voltage @T <sub>J</sub> =100°C | I <sub>R</sub>    | 1.0         |            |            |            |            |             |             | 50   | mA |
| Typical Junction Capacitance (Note2)   | C <sub>J</sub>    | 250         |            |            |            |            |             |             | pF   |    |
| Typical Thermal Resistance (Note3)   | R <sub>θJC</sub>  | 3.0         |            |            |            |            |             |             | °C/W |    |
| Operating Temperature Range  | T <sub>J</sub>    | -55 to +150 |            |            |            |            |             |             | °C   |    |
| Storage Temperature Range  | T <sub>STG</sub>  | -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.

FIG. 1 – FORWARD CURRENT DERATING CURVE

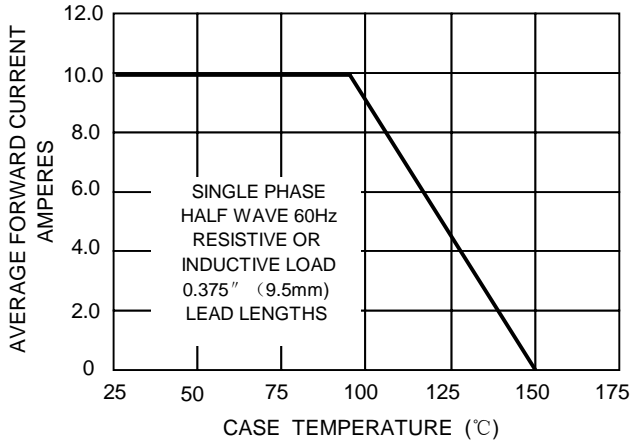


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

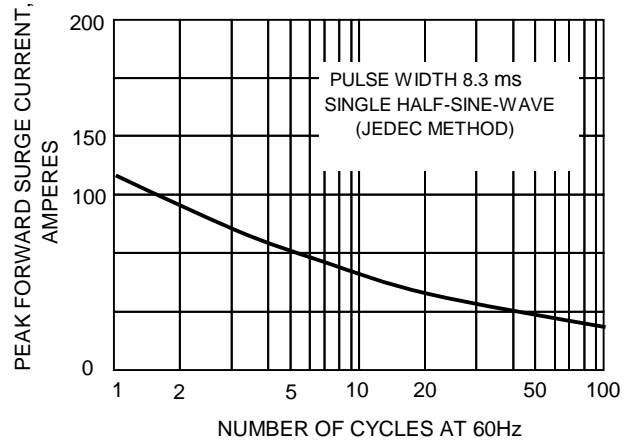


FIG.3-TYPICAL REVER CHARACTERISTICS

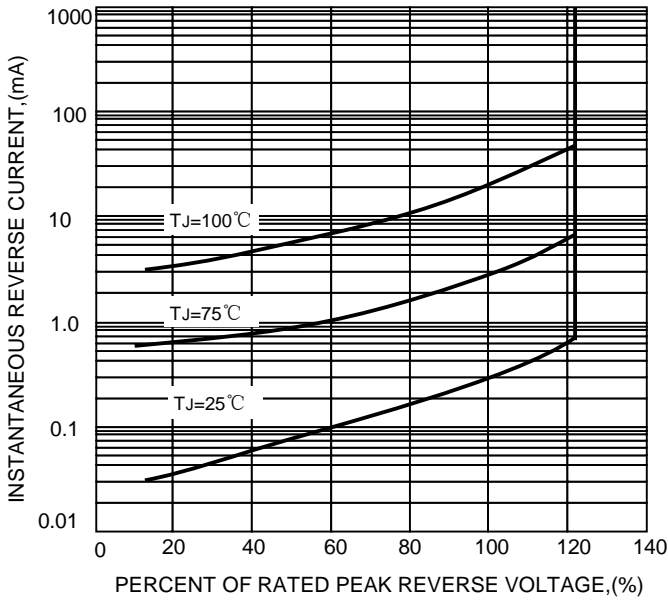


FIG.4-TYPICAL FORWARD CHARACTERISTICS

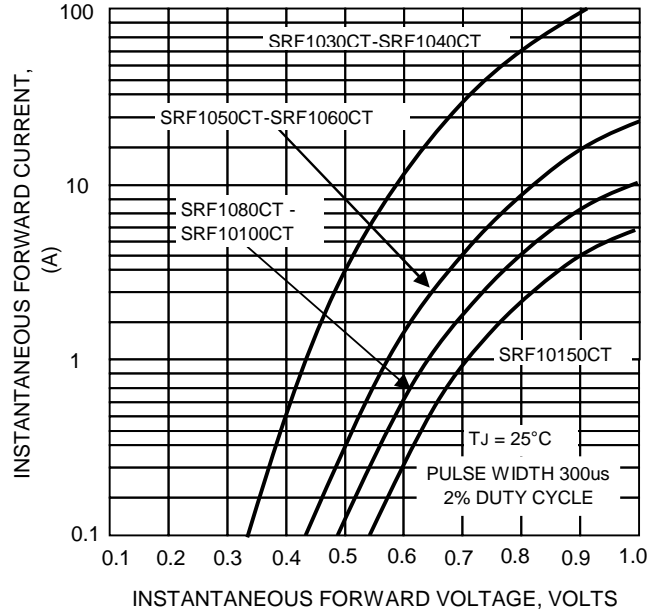


FIG.5 – TYPICAL JUNCTION CAPACITANCE

