



SRF2030CT thru SRF20150CT

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|---|---|
| SCHOTTKY BARRIER RECTIFIERS | REVERSE VOLTAGE - 30 to 100Volts FORWARD CURRENT - 20.0 Amperes |
| <p>FEATURES</p> <ul style="list-style-type: none"> ●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 <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ●Case: ITO-220AB molded plastic ●Polarity: As marked on the body ●Weight: 0.08ounces,2.24 grams ●Mounting position :Any | <p>ITO-220AB</p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p> |

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 2030CT | SRF 2040CT | SRF 2050CT | SRF 2060CT | SRF 2080CT | SRF 20100CT | SRF 20150CT | UNIT | |
|--|-------------------|------------|------------|------------|------------|------------|-------------|-------------|------|----|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 30 | 40 | 50 | 60 | 80 | 100 | 150 | V | |
| Maximum RMS Voltage | V _{RMS} | 21 | 28 | 35 | 42 | 56 | 70 | 105 | V | |
| Maximum DC Blocking Voltage | V _{DC} | 30 | 40 | 50 | 60 | 80 | 100 | 150 | V | |
| Maximum Average Forward Rectified Current (See Fig.1) @T _C =95 °C | I _(AV) | 20 | | | | | | | A | |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | 250 | | | | | | | A | |
| Peak Forward Voltage at 10.0A DC(Note1) | V _F | 0.55 | 0.70 | | 0.85 | | 0.95 | | V | |
| Maximum DC Reverse Current at Rated DC Bolcking Voltage @T _J =25°C @T _J =100°C | I _R | 1.0 | | | | 50 | | | | mA |
| Typical Junction Capacitance (Note2) | C _J | 600 | | | | | | | pF | |
| Typical Thermal Resistance (Note3) | R _{θJC} | 2.0 | | | | | | | °C/W | |
| Operating Temperature Range | T _J | -55to+125 | | | | | | | °C | |
| Storage Temperature Range | T _{STG} | -55to+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
SRF2030CT thru SRF20150CT



FIG. 1 – FORWARD CURRENT DERATING CURVE

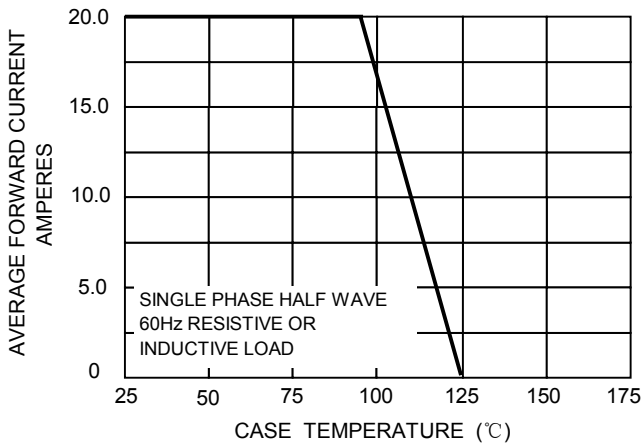


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

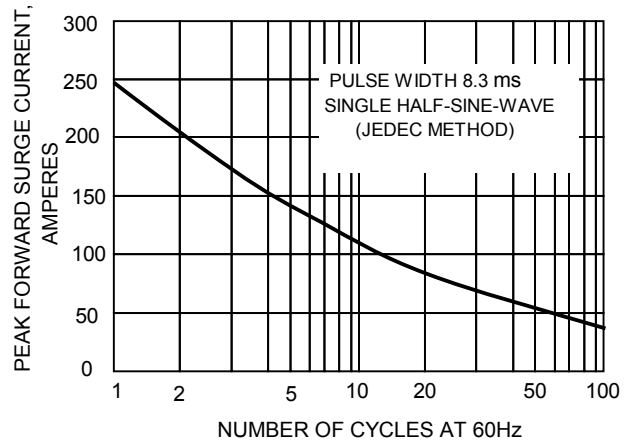


FIG.3-TYPICAL REVER CHARACTERISTICS

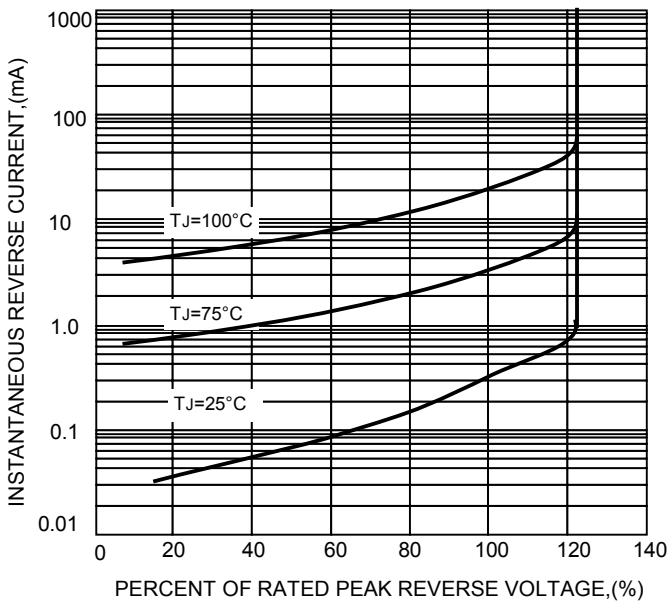


FIG.4-TYPICAL FORWARD CHARACTERISTICS

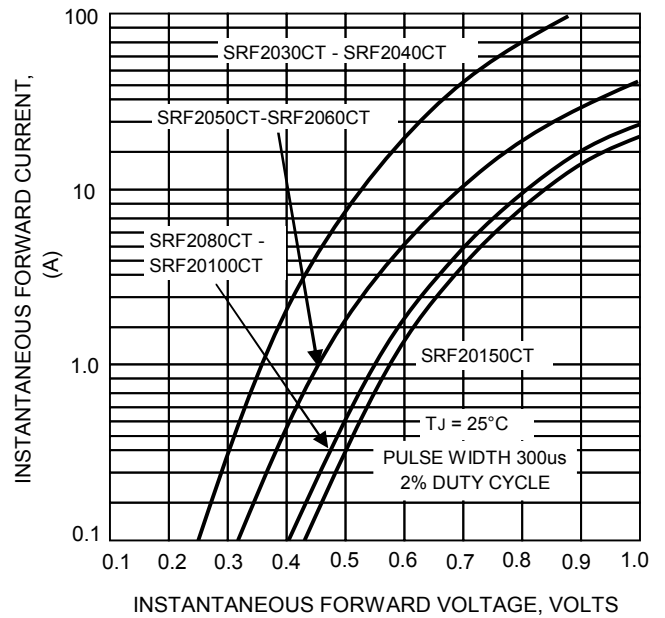


FIG.5 – TYPICAL JUNCTION CAPACITANCE

