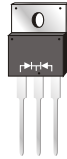


SR1020CT THRU SR10200CT

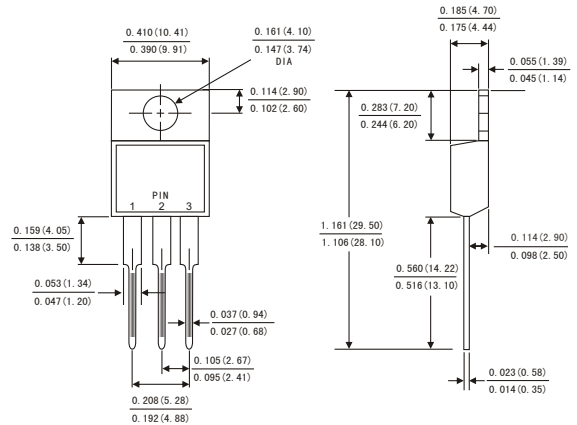
SCHOTTKY BARRIER RECTIFIER
 Reverse Voltage - 20 to 200 Volts
 Forward Current - 10.0Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- For use in low voltage ,high frequency inverters, Dual rectifier construction
- High temperature soldering guaranteed:260° C/10 seconds, , 0.25"(6.35mm)from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



TO-220AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC TO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25 °C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

| | Symbols | SR 1020CT | SR 1030CT | SR 1045CT | SR 1050CT | SR 1060CT | SR 1080CT | SR 10100CT | SR 10150CT | SR 10200CT | Units |
|--|------------------------|-------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|-------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 20 | 30 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | Volts |
| Maximum RMS voltage | V _{RMS} | 14 | 21 | 31 | 35 | 42 | 56 | 70 | 105 | 140 | Volts |
| Maximum DC blocking voltage | V _{DC} | 20 | 30 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | Volts |
| Maximum average forward rectified current(see Fig.1) | Per leg | 5.0 | | | | | | | | | Amps |
| | Total device | 10.0 | | | | | | | | | |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 150.0 | | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 10.0 A(Note 1) | V _F | 0.60 | | | 0.75 | | 0.85 | | 0.90 | 0.95 | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) | T _a = 25°C | 0.2 | | | | | | | | | mA |
| | T _a = 125°C | 15 | | | 50 | | | | | | |
| Typical thermal resistance (Note 2) | R _{θJC} | 2.5 | | | | | | | | | °C/W |
| Operating junction temperature range | T _J | -65 to +150 | | | | | | | | | °C |
| Storage temperature range | T _{STG} | -65 to +150 | | | | | | | | | °C |

- Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
 2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR1020CT THRU SR10200CT

FIG.1-FORWARD CURRENT DERATING CURVE

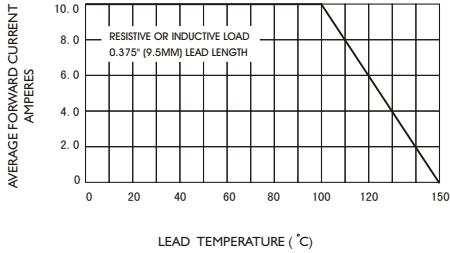


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

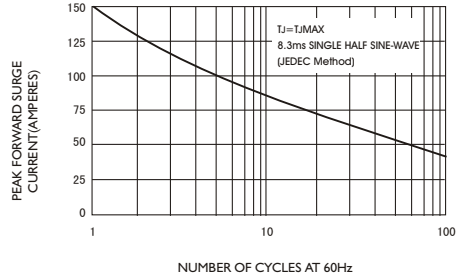


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

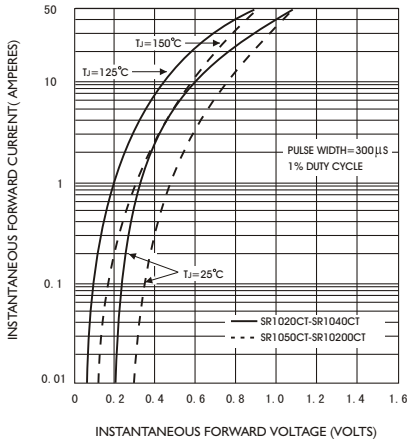


FIG.4-TYPICAL REVERSE CHARACTERISTICS

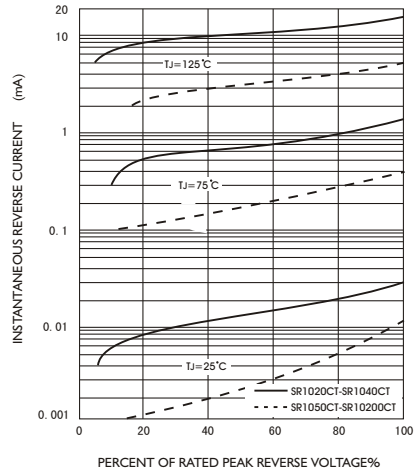


FIG.5-TYPICAL JUNCTION CAPACITANCE

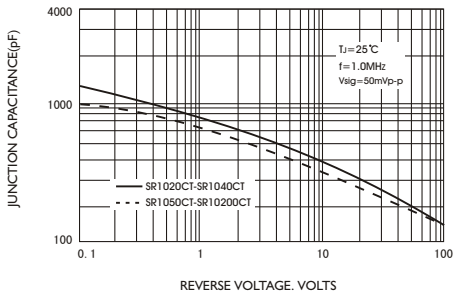


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

