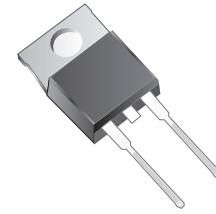


SR1030-G Thru. SR10200-G

Forward current: 10A

Reverse voltage: 30 to 200V

RoHS Device

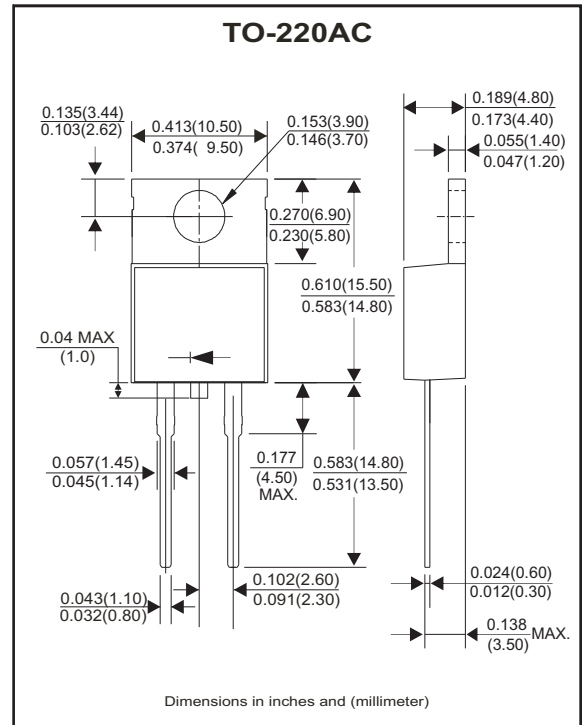


Features

- 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.
- For use in low voltage , high frequency inverters , free wheeling, and polarity protection applications.

Mechanical data

- Case: TO-220AC, molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Polarity: As marked on the body.
- Mounting position: Any
- Weight: 2.24 grams



Maximum Ratings and Electrical Characteristics

Ratings 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 | SR10 30-G | SR10 40-G | SR10 50-G | SR10 60-G | SR10 80-G | SR10 100-G | SR10 150-G | SR10 200-G | Unit |
|--|-----------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|--------------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum RMS voltage | V_{RMS} | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | V |
| Maximum DC blocking voltage | V_{DC} | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum average forward rectified current (See Fig.1) @ $T_c=95^\circ C$ | I_{AV} | 10.0 | | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave super imposed on rated load (JEDEC method) | I_{FSM} | 175 | | | | | | | | A |
| Peak forward voltage at 10.0A DC (Note 1) | V_F | 0.55 | 0.70 | | | 0.85 | | 0.95 | | V |
| Maximum DC reverse current @ $T_J=25^\circ C$ at rated DC blocking voltage @ $T_J=100^\circ C$ | I_R | | | | | 1.0 | | | | mA |
| Typical junction capacitance (Note 2) | C_J | | | | | 500 | | | | pF |
| Typical thermal resistance (Note 3) | $R_{\theta JC}$ | | | | | 2.5 | | | | $^\circ C/W$ |
| Operating temperature range | T_J | | | | | -55 ~ +125 | | | | $^\circ C$ |
| Storage temperature range | T_{STG} | | | | | -55 ~ +150 | | | | $^\circ C$ |

NOTES: 1. 1.300us pulse width, 2% duty cycle.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to case.

Company reserves the right to improve product design , functions and reliability without notice.

REV:B

RATING AND CHARACTERISTIC CURVES (SR1030-G Thru. SR10200-G)

Fig.1 Forward Current Derating Curve

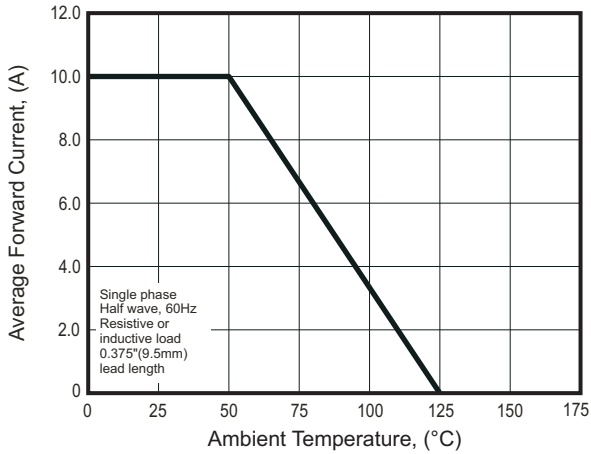


Fig.2 Max. Non-repetitive Surge Current

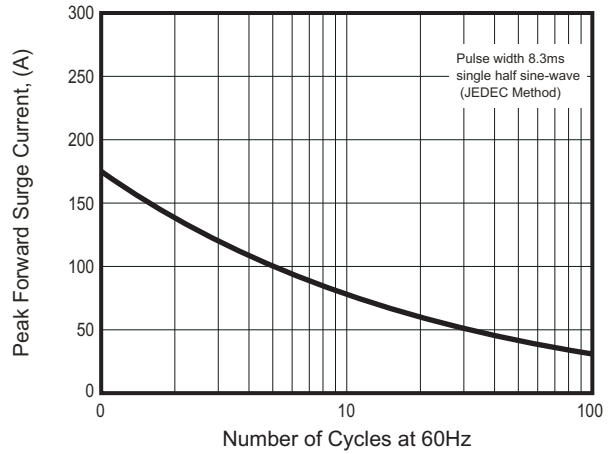


Fig.3 Typical Reverse Characteristics

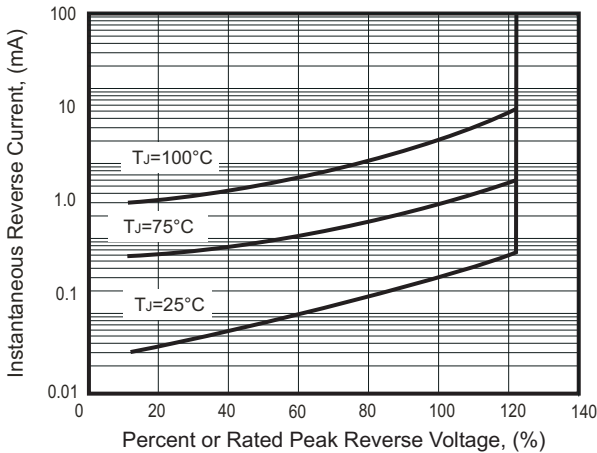


Fig.4 Typical Forward Characteristics

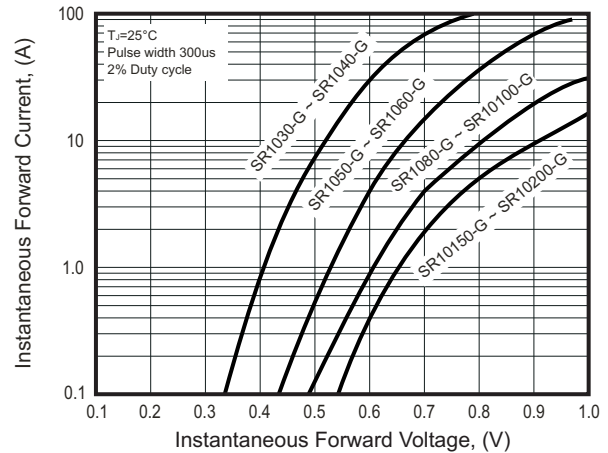
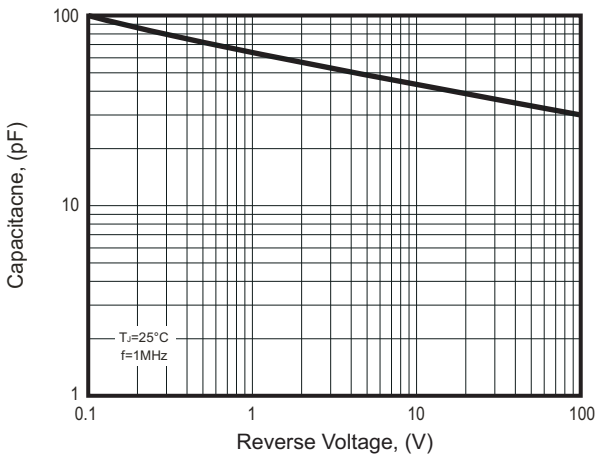


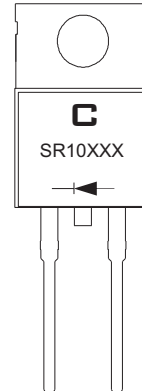
Fig.5 Typical Junction Capacitance



Company reserves the right to improve product design, functions and reliability without notice.

Marking Code

| Part Number | Marking code |
|-------------|--------------|
| SR1030-G | SR1030 |
| SR1040-G | SR1040 |
| SR1050-G | SR1050 |
| SR1060-G | SR1060 |
| SR1080-G | SR1080 |
| SR10100-G | SR10100 |
| SR10150-G | SR10150 |
| SR10200-G | SR10200 |



C = Compchip Logo
XXX = Product type marking code

Standard Packaging

| Case Type | TUBE PACK | |
|-----------|-----------------|----------------|
| | TUBE (pcs) | BOX (pcs) |
| TO-220AC | 50 | 2,000 |