

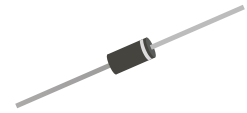
SR320-HF Thru. SR3200-HF

Forward current: 3.0A

Reverse voltage: 20 to 200V

RoHS Device

Halogen Free

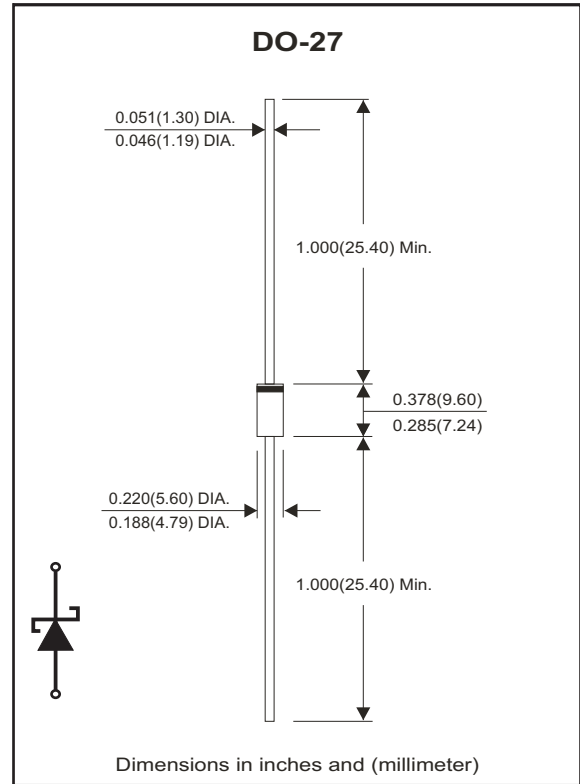


Features

- Axial lead type devices for through hole design.
- Low power loss, high efficiency.
- High current capability, Low forward voltage drop.
- High surge capability.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free part meets environmental standards of MIL-STD-19500/228

Mechanical Data

- Case: Molded plastic, DO-201AD/DO-27
- Epoxy: UL94V-0 rate flame retardant.
- Lead: Axial lead, solderable per MIL-STD-202, Method 208 guaranteed.
- Polarity: color band denoted cathode end.
- Weight: 1.10 grams(approx.).



Maximum Ratings and Electrical Characteristics

Ratings at Ta=25°C unless otherwise noted.
Single phase, half wave, 60Hz, resistive or inductive loaded.
For capacitive load, derate current by 20% .

| Parameter | Symbol | SR320 -HF | SR340 -HF | SR360 -HF | SR3100 -HF | SR3150 -HF | SR3200 -HF | Unit |
|---|------------------|------------|-----------|-----------|------------|------------|------------|------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 20 | 40 | 60 | 100 | 150 | 200 | V |
| Maximum RMS voltage | V _{RMS} | 14 | 28 | 42 | 70 | 105 | 140 | V |
| Maximum DC blocking voltage | V _{DC} | 20 | 40 | 60 | 100 | 150 | 200 | V |
| Maximum forward voltage @3A, TA=25°C | V _F | 0.45 | 0.50 | 0.70 | 0.81 | 0.87 | 0.90 | V |
| Operating junction temperature range | T _J | -50 ~ +150 | | | | -50 ~ +175 | | °C |

| Parameter | Conditions | Symbol | MIN. | TYP. | MAX. | Unit |
|----------------------------|--|------------------|------|------|------|------|
| Forward rectified current | see Fig.1 | I _o | | | 3.0 | A |
| Forward surge current | 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I _{FSM} | | | 70 | A |
| Reverse current | V _R =V _{RRM} TA=25°C | I _R | | | 0.5 | mA |
| | V _R =V _{RRM} TA=100°C | I _R | | | 20 | mA |
| Thermal resistance | Junction to ambient | R _{θJA} | | 55 | | °C/W |
| Diode junction capacitance | f=1MHz and applied 4V DC reverse Voltage | C _J | | 250 | | pF |
| Storage temperature range | | T _{STG} | -55 | | +175 | °C |

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

REV:B

RATING AND CHARACTERISTIC CURVES (SR320-HF Thru. SR3200-HF)

Fig.1 - Typical Forward Current Derating Curve

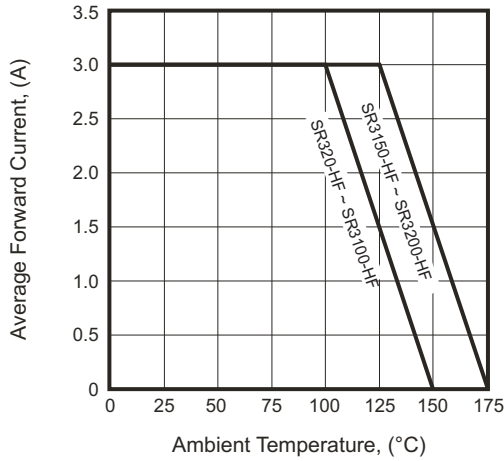


Fig.2 - Typical Forward Characteristics

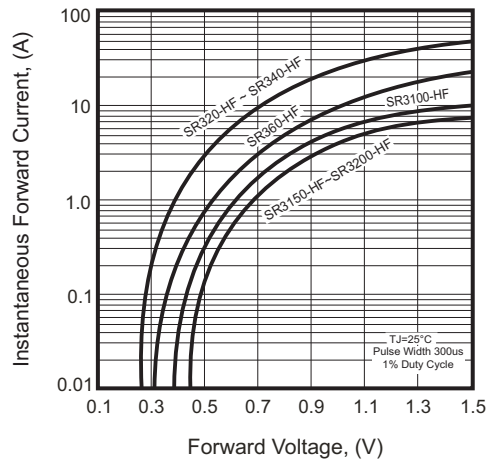


Fig.3 - Maximum Non-repetitive Forward Surge Current

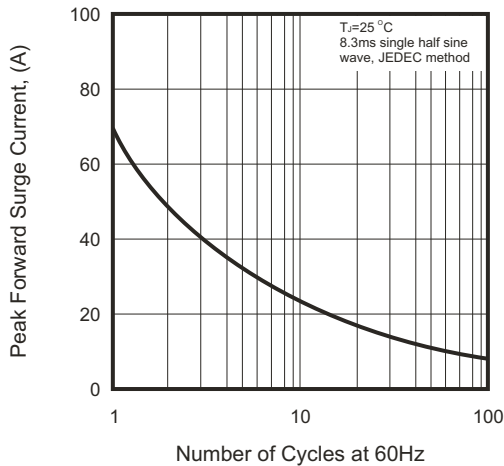


Fig.4 - Typical Junction Capacitance

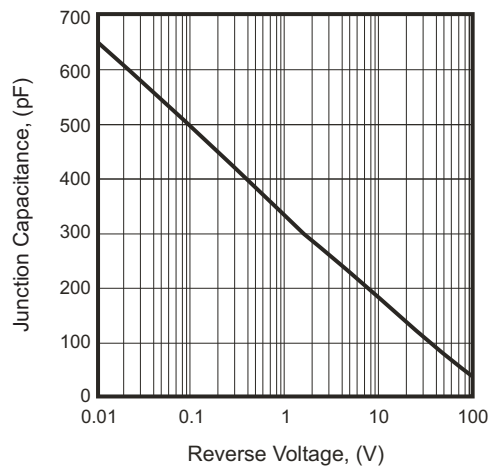
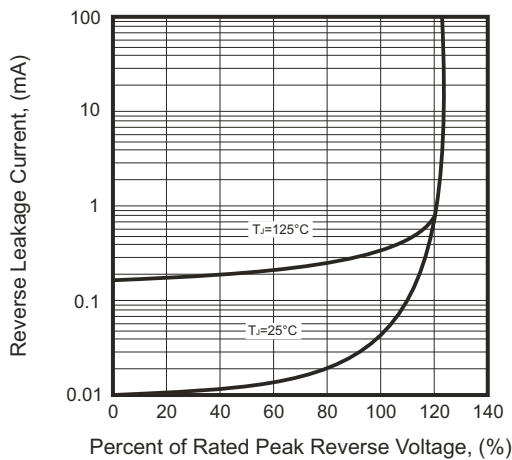
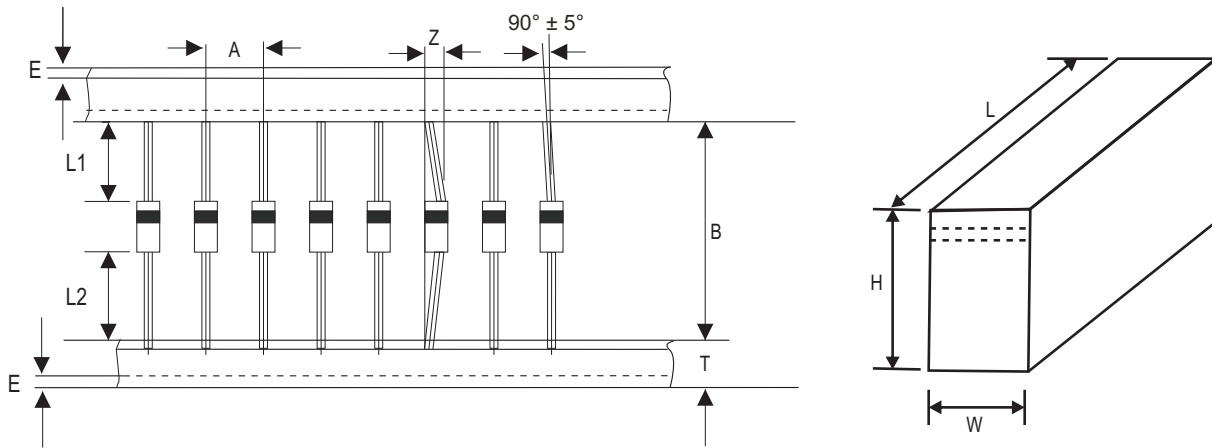


Fig.5 - Typical Reverse Characteristics



Taping Specification For Axial Lead Diodes

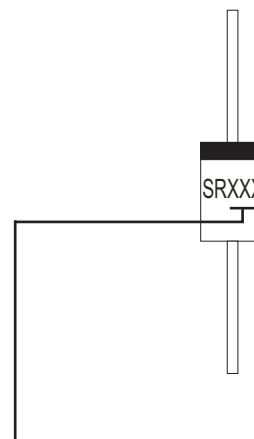


| DO-27 | SYMBOL | A | B | Z | T | E |
|-------|--------|---------------|-------------|-------------|---------------|-------------|
| | (mm) | 10.00 ± 0.50 | 52.40 (max) | 1.60 (max) | 6.00 ± 0.40 | 3.00 (max) |
| | (inch) | 0.394 ± 0.020 | 2.063 (max) | 0.062 (max) | 0.236 ± 0.016 | 0.118 (max) |

| DO-27 | SYMBOL | L1-L2 | L | W | H |
|-------|--------|------------|----------------|---------------|---------------|
| | (mm) | 1.00(max) | 260 ± 5.00 | 75 ± 5.00 | 145 ± 5.00 |
| | (inch) | 0.039(max) | 10.236 ± 0.197 | 2.953 ± 0.197 | 5.709 ± 0.197 |

Marking Code

| Part Number | Marking Code |
|-------------|--------------|
| SR320-HF | SR32 |
| SR340-HF | SR34 |
| SR360-HF | SR36 |
| SR3100-HF | SR310 |
| SR3150-HF | SR315 |
| SR3200-HF | SR320 |



XX / XXX = Product type marking code

Standard Packaging

| Case Type | AMMO PACK | |
|-----------|----------------|-------------------|
| | BOX (pcs) | CARTON (pcs) |
| DO-27 | 1,200 | 12,000 |

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