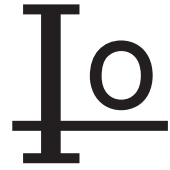


SR540L

LOW VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 40 Volts

Forward Current - 5.0Amperes



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
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260 C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/ EU

MECHANICAL DATA

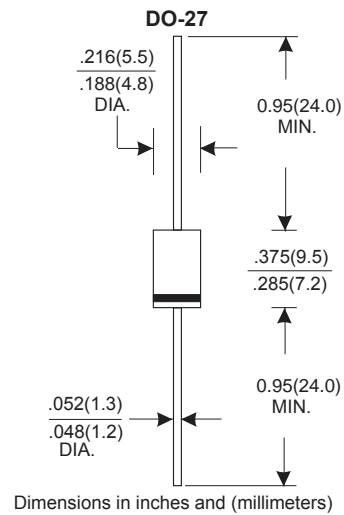
- Case: JEDEC DO-27 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- * Weight: 1.04 grams
- *Lead Free Finish/RoHS Compliant

VOLTAGE RANGE

40 Volts

CURRENT

5.0 Amperes



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 540L | Units |
|---|-------------------|------------------------|-------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 40 | Volts |
| Maximum RMS voltage | V _{RMS} | 28 | Volts |
| Maximum DC blocking voltage | V _{DC} | 40 | Volts |
| Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1) | I _(AV) | 5.0 | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T _J) | I _{FSM} | 120 | Amps |
| Maximum instantaneous forward voltage at 5.0 A(Note 1) | V _F | 0.45 | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) | I _R | T _a = 25°C | 1.0 |
| | | T _a = 100°C | 30 |
| Typical junction capacitance(Note 3) | C _J | 500 | pF |
| Typical thermal resistance (Note 2) | R _{θJA} | 25.0 | °C/W |
| | R _{θJL} | 8.0 | |
| Operating junction temperature range | T _J | -65 to+ 150 | °C |
| Storage temperature range | T _{STG} | -65 to+ 150 | °C |

Notes: 1.Pulse test: 300μ s pulse width,1% duty cycle

2.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.375"(9.5mm)lead length

3.Measured at 1MHz and reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES (SR540L)

FIG.1-FORWARD CURRENT DERATING CURVE

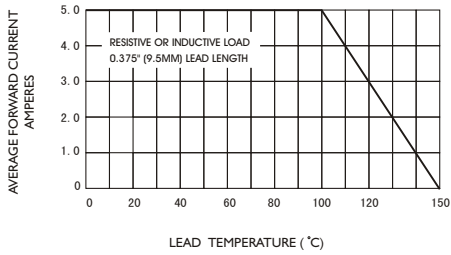


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

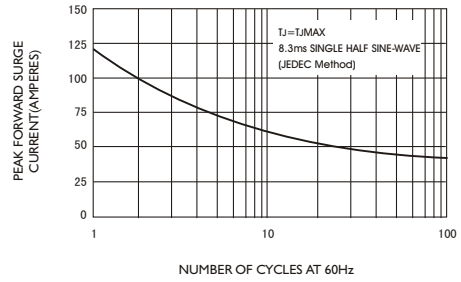


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

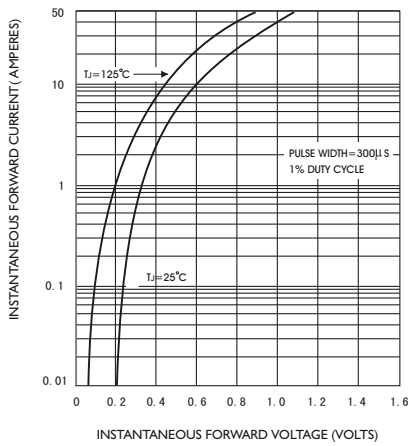


FIG.4-TYPICAL REVERSE CHARACTERISTICS

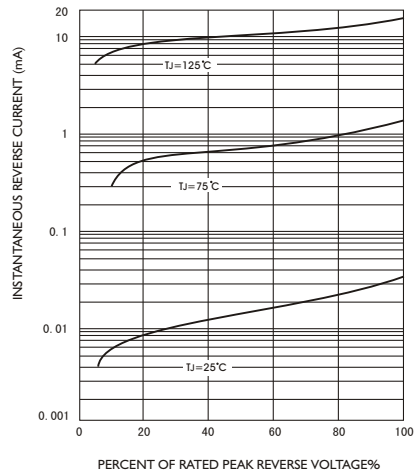


FIG.5-TYPICAL JUNCTION CAPACITANCE

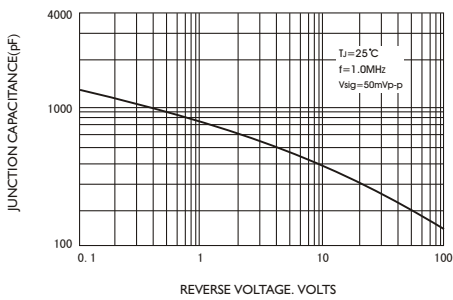


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

