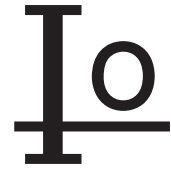


SR5100L

LOW VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 100 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 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

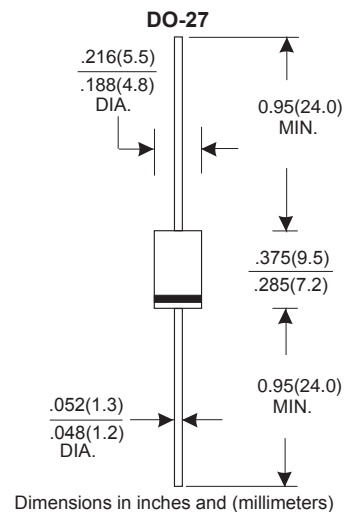
- Case: JEDEC DO-27 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- * Weight: 1.04 grams
- * Lead Free Finish/RoHS Compliant

VOLTAGE RANGE

100 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	SR5100L	Units
Maximum repetitive peak reverse voltage	VRRM	100	Volts
Maximum RMS voltage	VRMS	70	Volts
Maximum DC blocking voltage	VDC	100	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 I _A)	IFSM	200	Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1)	V _F	0.70	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I _R	T _A = 25°C	0.5
		T _A = 100°C	50
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 (SR5100L)

FIG.1-FORWARD CURRENT DERATING CURVE

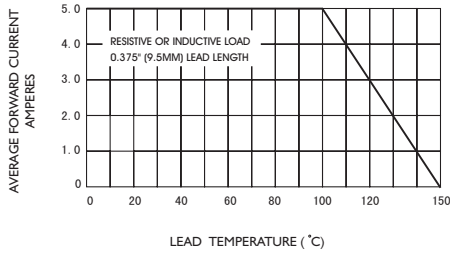


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

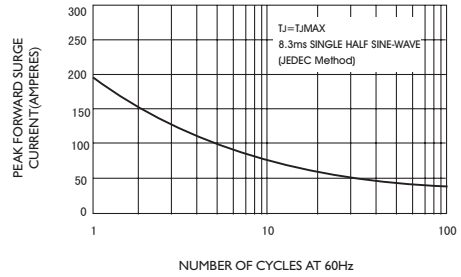


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

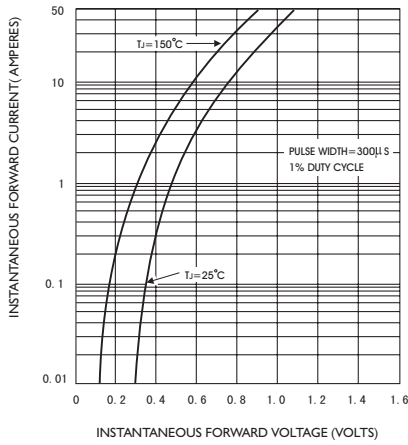


FIG.4-TYPICAL REVERSE CHARACTERISTICS

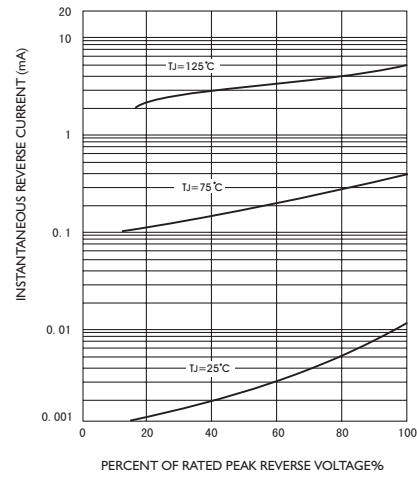


FIG.5-TYPICAL JUNCTION CAPACITANCE

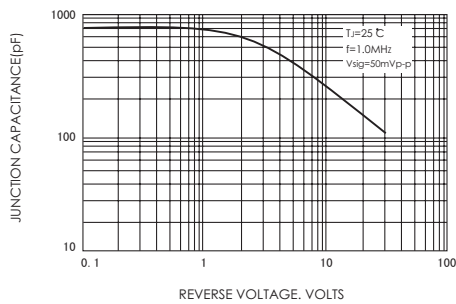


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

