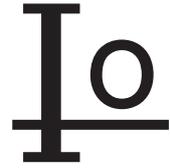


SR545L

LOW VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 45 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

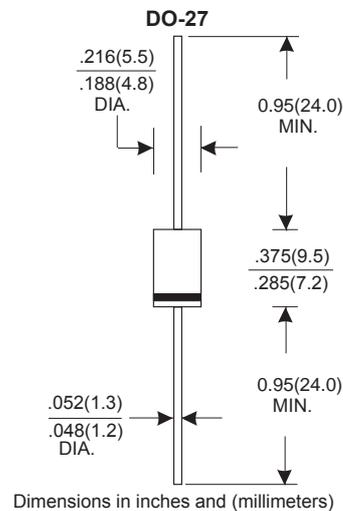
- Case: JEDEC DO-27 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- * Weight: 1.04 grams
- *Lead Free Finish/RoHS Compliant

VOLTAGE RANGE

45 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 545 L	Units
Maximum repetitive peak reverse voltage	V _{RRM}	45	Volts
Maximum RMS voltage	V _{RMS}	32	Volts
Maximum DC blocking voltage	V _{DC}	45	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	I <sub(av)< sub=""></sub(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 (SR545L)

FIG.1-FORWARD CURRENT DERATING CURVE

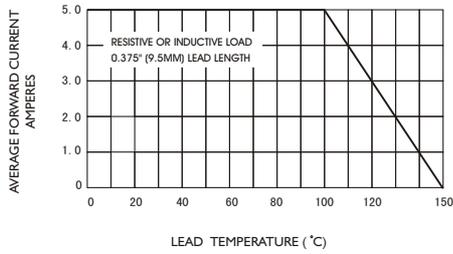


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

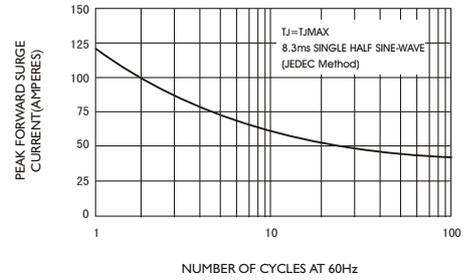


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

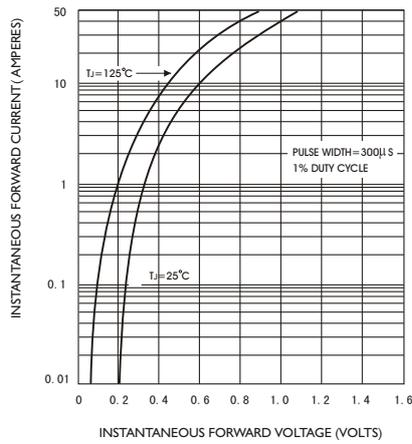


FIG.4-TYPICAL REVERSE CHARACTERISTICS

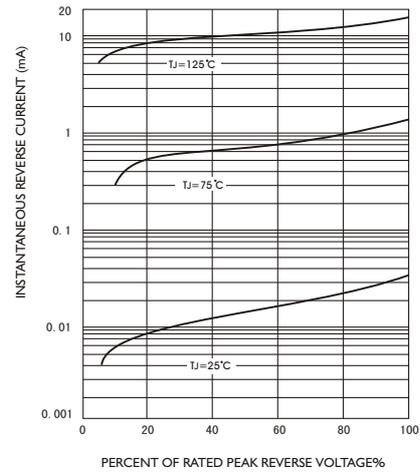


FIG.5-TYPICAL JUNCTION CAPACITANCE

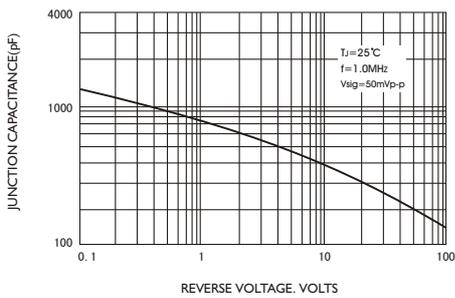


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

