

# SR560L

## LOW VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 60 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

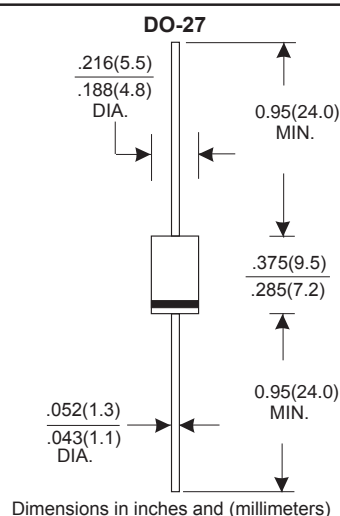
- Case: JEDEC DO-27 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- \* Weight: 1.04 grams
- \* Lead Free Finish/RoHS Compliant

### VOLTAGE RANGE

60 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	SR560L	Units
Maximum repetitive peak reverse voltage	VRRM	60	Volts
Maximum RMS voltage	VRMS	42	Volts
Maximum DC blocking voltage	VDC	60	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 Tj)	IFSM	120	Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1 )	VF	0.55	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	Ir	T <sub>a</sub> = 25°C	0.5
		T <sub>a</sub> = 100°C	30
Typical junction capacitance(Note 3)	CJ	500	Pf
Typical thermal resistance (Note 2)	R <sub>θJA</sub>	25.0	°C/W
	R <sub>θJL</sub>	8.0	
Operating junction temperature range	TJ	-65 to +150	°C
Storage temperature range	TSTG	-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 (SR560L )

FIG.1-FORWARD CURRENT DERATING CURVE

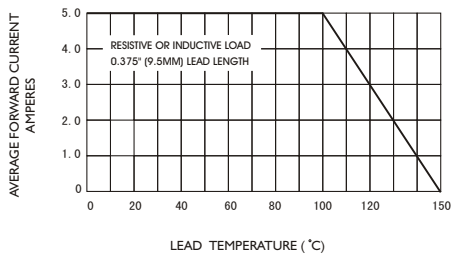


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

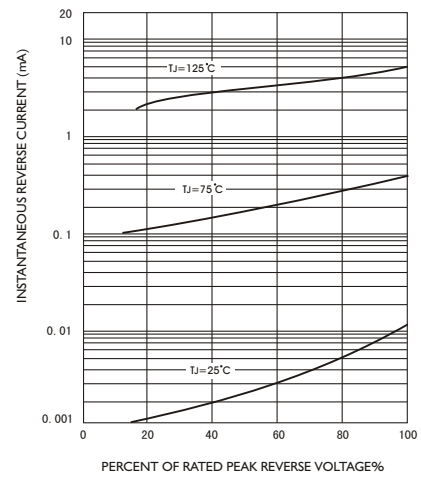
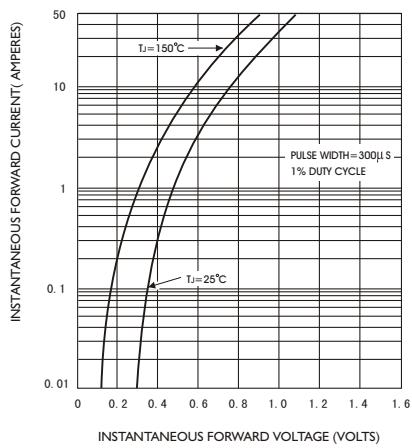
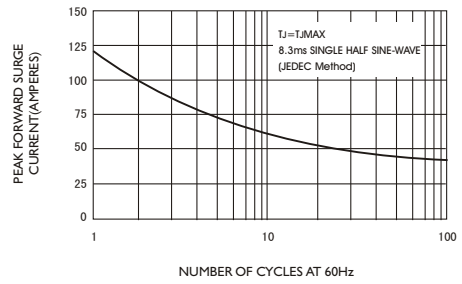


FIG.5-TYPICAL JUNCTION CAPACITANCE

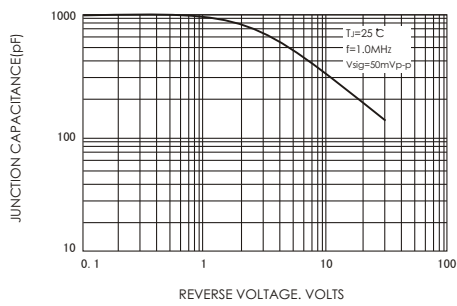


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

