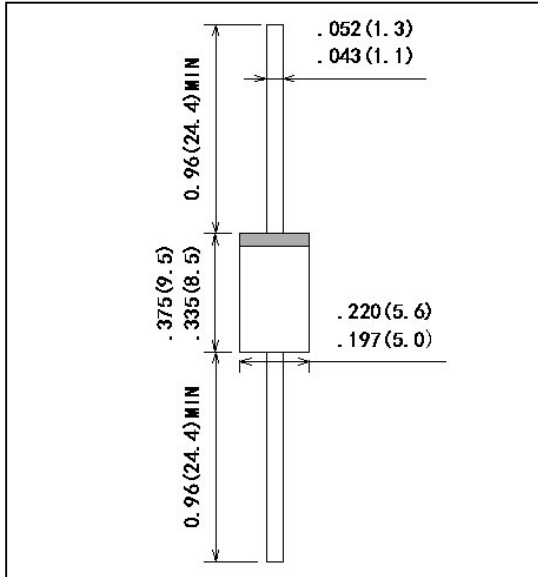


5 A / 150 V

**Package Outline Dimensions** in mm (inches)

**DO 27**



**Features**

- Metal-Semiconductor junction with guarding
- Very low forward voltage drop
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

**Typical Applications**

- For use in in low voltage, high frequency inverters.

**Mechanical Data**

- Case:DO27 Plastic Package
- Polarity:Color band denotes cathode end

**Maximum ratings**

Ratings at TA=25°C (unless otherwise specified)

Parameter	Symbol	SR5150	Unit
Maximum recurrent peak reverse voltage	VRRM	150	V
Maximum RMS voltage	VRMS	105	V
Maximum DC blocking voltage	VDC	150	V
Maximum average forward rectified current (Note1)	IF(AV)	5.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	120	A
Storage temperature range	TS	-55 ~ 150	°C
Operating Junction temperature range	Tj	-55 ~ 150	°C
Thermal Resistance (Note1)	RthJL	20	°C/W

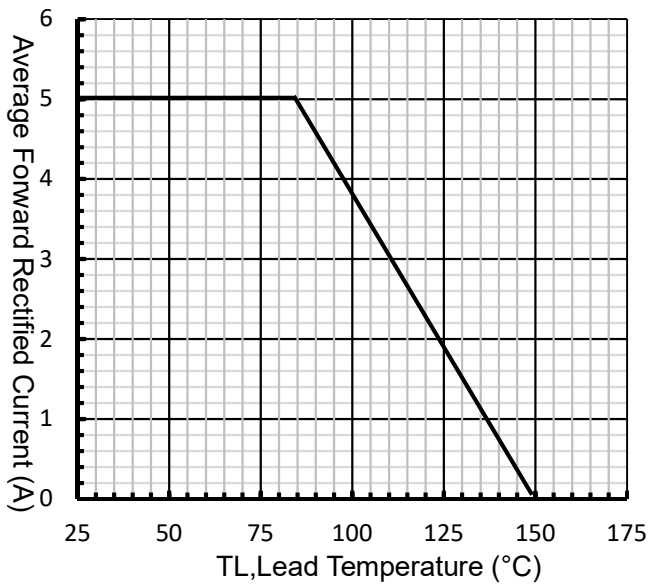
Note1: Vertical P.C.B. mounting, 12.7 mm lead length with 63.5 mm x 63.5 mm copper pad.

**Electrical characteristics**

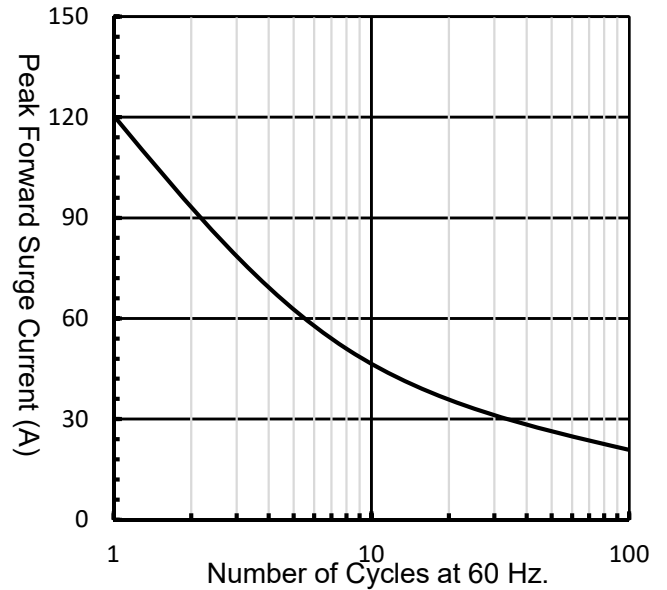
Ratings at TA=25°C (unless otherwise specified)

Parameter	Test Conditions	Symbol	SR5150	Unit
Maximum forward voltage	IF=5.0 A	VF	0.90	V
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	0.1	mA
	TA=100°C		5	

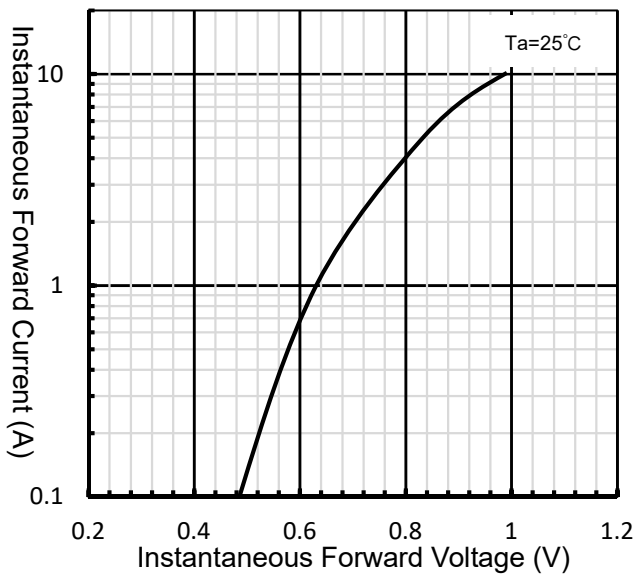
**Characteristics Curves**



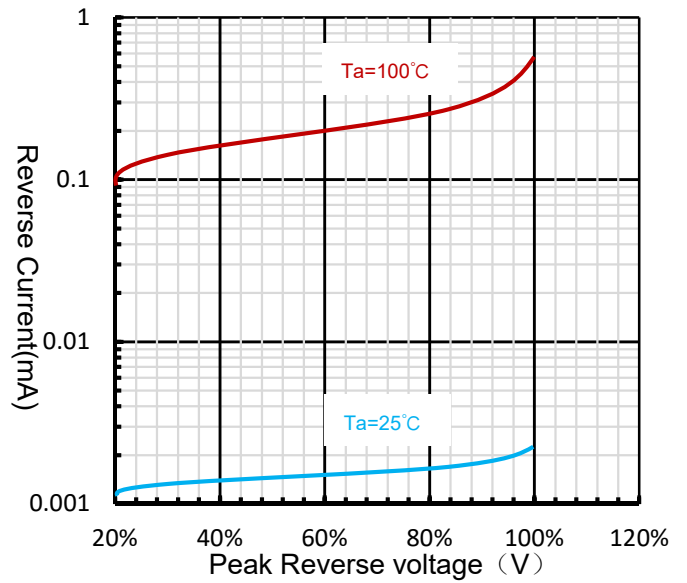
**Fig.1 FORWARD CURRENT DERATING CURVE**



**Fig.2 MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT**



**Fig. 3 TYPICAL FORWARD CHARACTERISTIC**



**Fig. 4 Typical Reverse Characteristics**