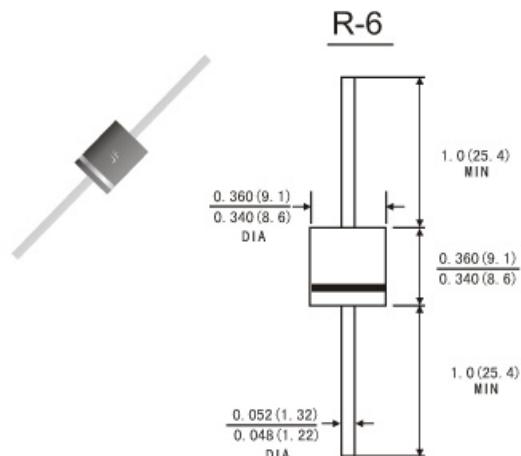


## FEATURES

- 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: R-6 molded plastic body
- Terminals: Plated axial lead, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.07ounce, 2.1 grams



Dimensions in inches and (millimeters)

## 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	10SQ050	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	I <sub>(AV)</sub>	10.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T <sub>J</sub> )	I <sub>FSM</sub>	150.0	Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1 )	V <sub>F</sub>	0.55	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1 )	I <sub>R</sub>	0.5	mA
T <sub>A</sub> = 25 °C		50	
Typical junction capacitance(Note 3)	C <sub>J</sub>	400	pF
Typical thermal resistance (Note 2)	R <sub>θJC</sub>	3.0	°C/W
Operating junction temperature range	T <sub>J</sub>	-65 to +200	°C
Storage temperature range	T <sub>STG</sub>	-65 to +200	°C

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

2.Thermal resistance from junction to case

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