

**SURFACE MOUNT SILICON RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 0.5 Ampere**

**FEATURES**

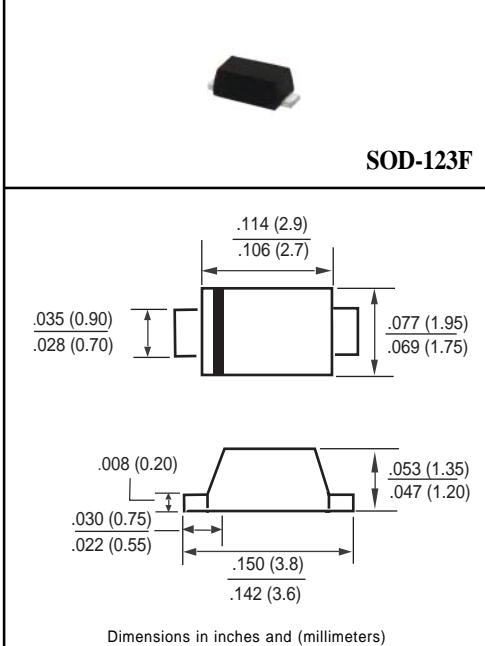
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.016 gram

**MECHANICAL DATA**

- \* Epoxy : Device has UL flammability classification 94V-0

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)**

RATINGS	SYMBOL	05A1	05A2	05A3	05A4	05A5	05A6	05A7	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 55°C	I <sub>O</sub>				0.5				Amps
Peak Forward Surge Current I <sub>FM</sub> (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>				15				Amps
Typical Junction Capacitance (Note 1)	C <sub>J</sub>				14				pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>				-55 to + 150				°C

**ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)**

CHARACTERISTICS	SYMBOL	05A1	05A2	05A3	05A4	05A5	05A6	05A7	UNITS
Maximum Forward Voltage at 0.5A DC	V <sub>F</sub>				1.1				Volts
Maximum Full Load Reverse Current, Full cycle Average at TA=55°C	I <sub>R</sub>				30				uAmps
Maximum DC Average Reverse Current at @ TA = 25°C					5.0				uAmps
Rated DC Blocking Voltage					50				uAmps

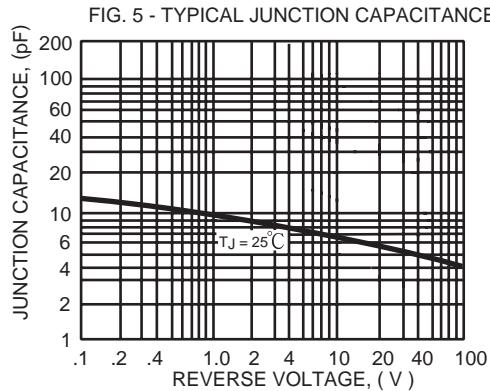
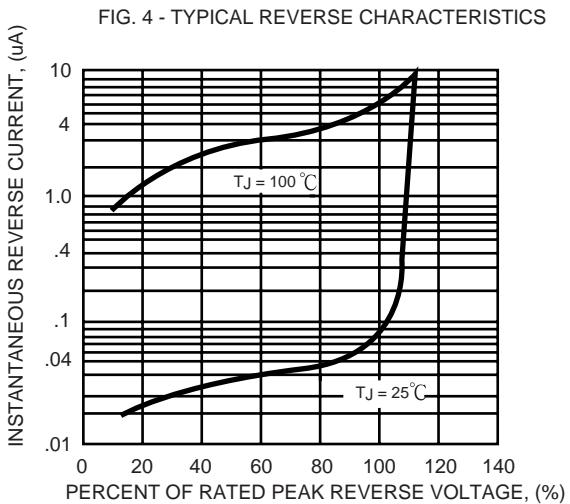
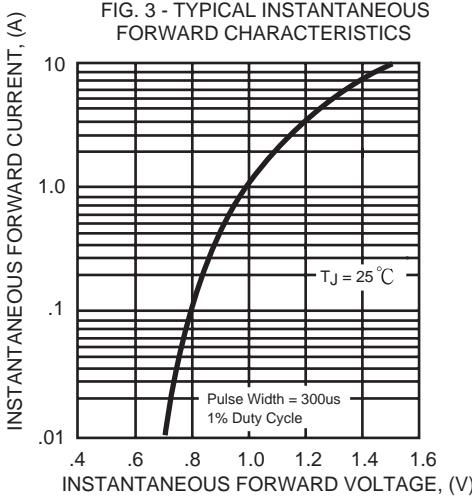
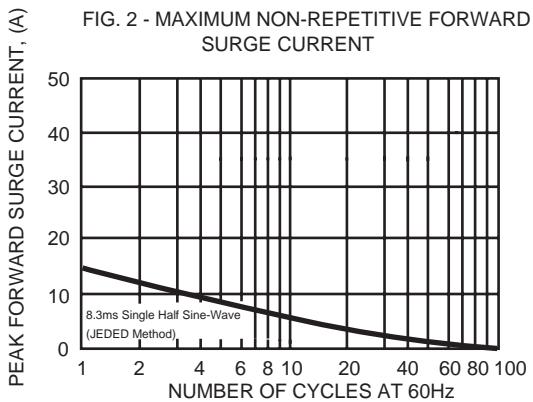
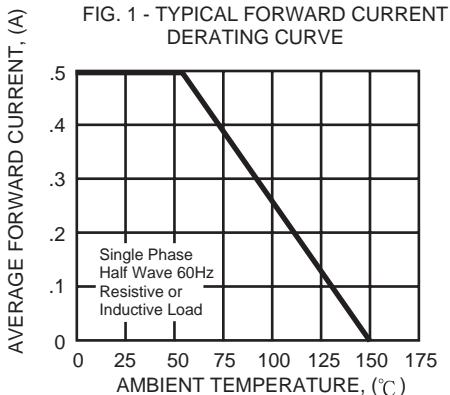
NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC

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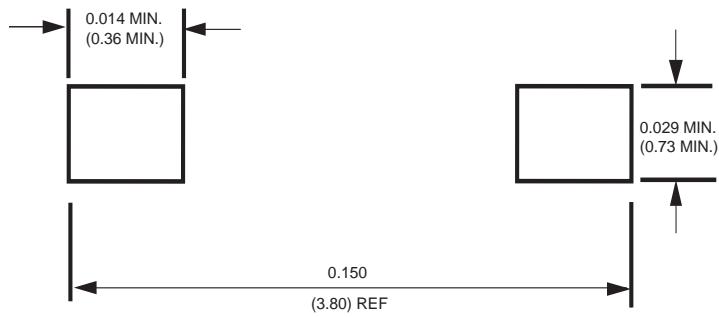
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

REV:B

# RATING AND CHARACTERISTIC CURVES ( 05A1 THRU 05A7 )



## *Mounting Pad Layout*



Dimensions in inches and (millimeters)