

**HIGH VOLTAGE SILICON RECTIFIER**
**VOLTAGE RANGE 2500 to 5000 Volts CURRENT 0.2 Ampere**
**FEATURES**

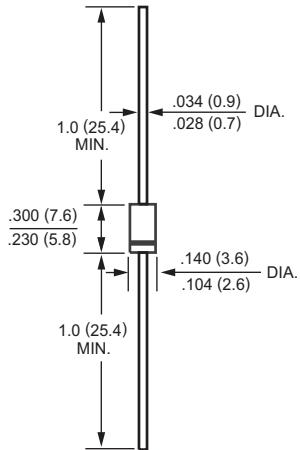
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.35 gram

**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%.


**DO-15**


Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	R2500	R3000	R4000	R5000	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	2500	3000	4000	5000	Volts
Maximum RMS Volts	V <sub>RMS</sub>	1750	2100	2800	3500	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	2500	3000	4000	5000	Volts
Maximum Average Forward Rectified Current at TA = 50°C	I <sub>o</sub>		200			mAmps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>		30			Amps
Typical Current Squared Time	I <sup>2</sup> t		3.74			A <sup>2</sup> /Sec
Typical Thermal Resistance	R <sub>θJA</sub>		65			°C/W
	R <sub>θJL</sub>		30			
Typical Junction Capacitance (Note)	C <sub>J</sub>		30			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	R2500	R3000	R4000	R5000	UNITS
Maximum Instantaneous Forward Voltage at 0.2A DC	V <sub>F</sub>	3.0	4.0	5.0		Volts
Maximum DC Reverse Current @TA = 25°C at Rated DC Blocking Voltage	I <sub>R</sub>		5.0			uAmps
@TA = 100°C			50			
.375", (9.5mm) lead length at TL = 75°C			30			

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2016-09

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

REV: A

3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

## RATING AND CHARACTERISTIC CURVES ( R2500 THRU R5000 )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

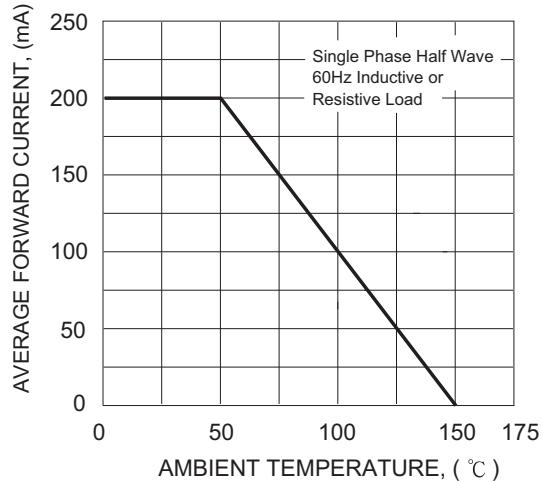


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

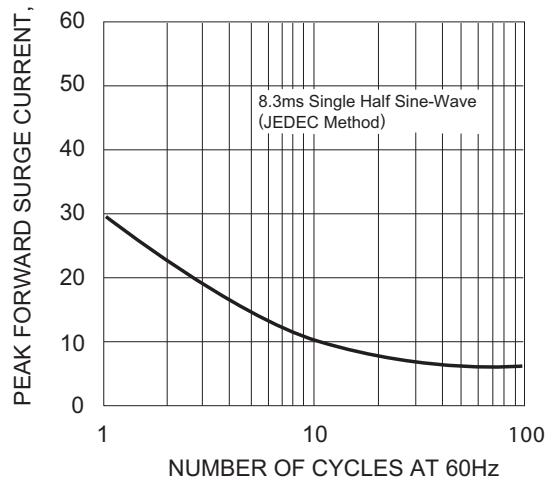
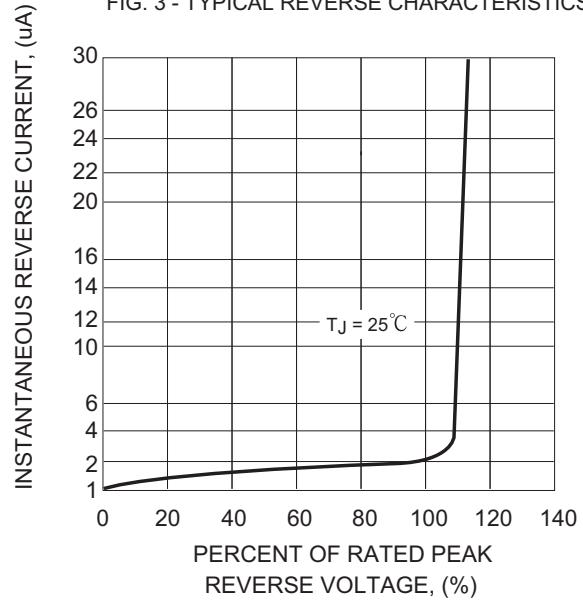
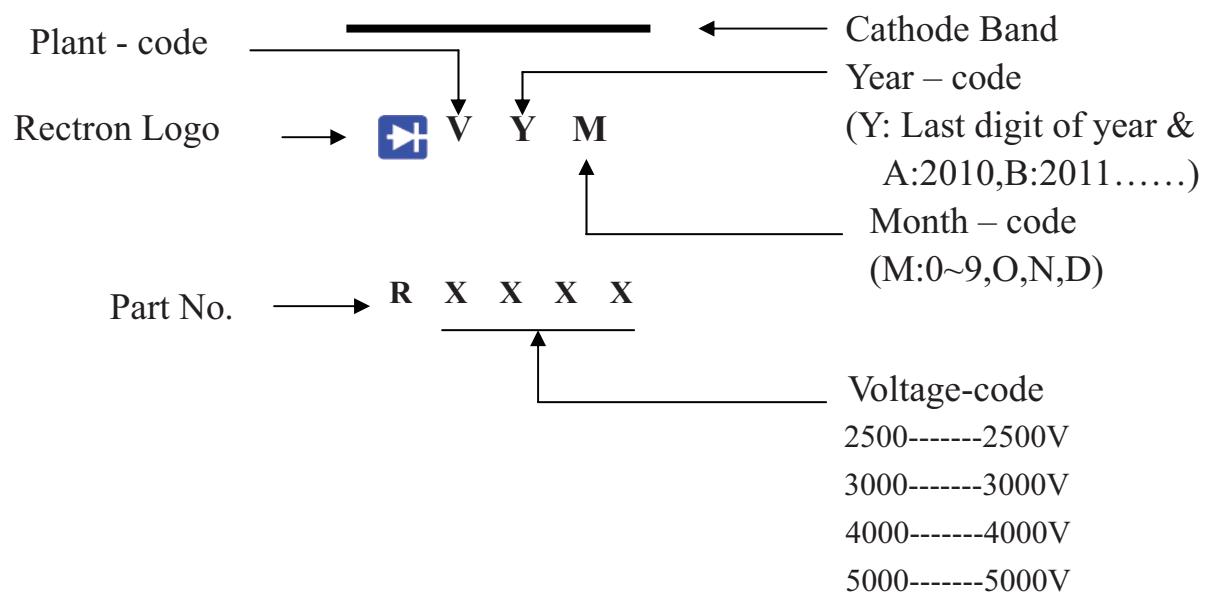


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS



## Marking Description



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-15	-B	500	194*84*21	415*220*255	25,000	12.74

### REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-15	-T	4,000	4,000	5.0	52	330	355*350*335	16,000	10.05

### AMMO PACK

PACKAGE	PACKING CODE	REEL ( EA )	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON ( EA )	GROSS WEIGHT (Kg)
DO-15	-F	1,500	5.0	52	255*73*100	400*268*225	15,000	8.8

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