

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

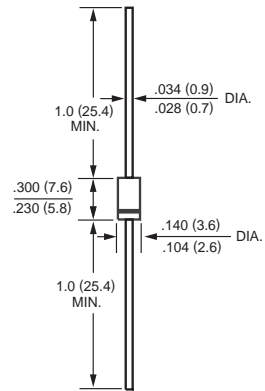
- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.35 gram

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 _{RRM}	2500	3000	4000	5000	Volts
Maximum RMS Volts	V _{RMS}	1750	2100	2800	3500	Volts
Maximum DC Blocking Voltage	V _{DC}	2500	3000	4000	5000	Volts
Maximum Average Forward Rectified Current at TA = 50°C	I _o	200				mAmps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30				Amps
Typical Thermal Resistance	R θ JA	65				°C/W
	R θ JL	30				
Typical Junction Capacitance (Note)	C _J	30				pF
Operating and Storage Temperature Range	T _J , T _{STG}	-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 _F	3.0	4.0	5.0		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	@ TA = 25°C				uAmps
		50				
Maximum Full Load Reverse Current Average, Full Cycle .375", (9.5mm) lead length at TL = 75°C		30				uAmps

- NOTES :
1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
 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

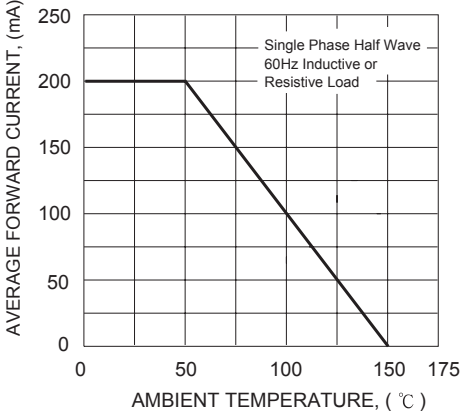


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

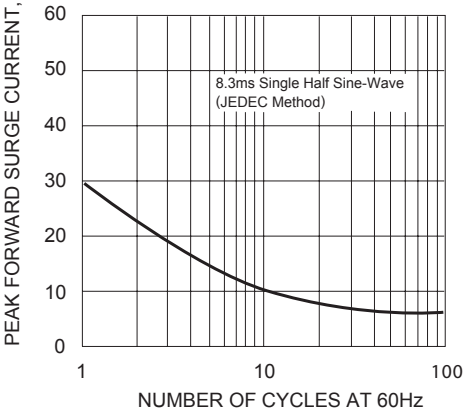
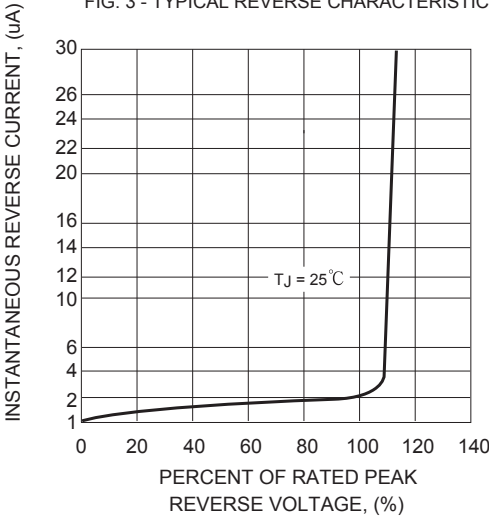
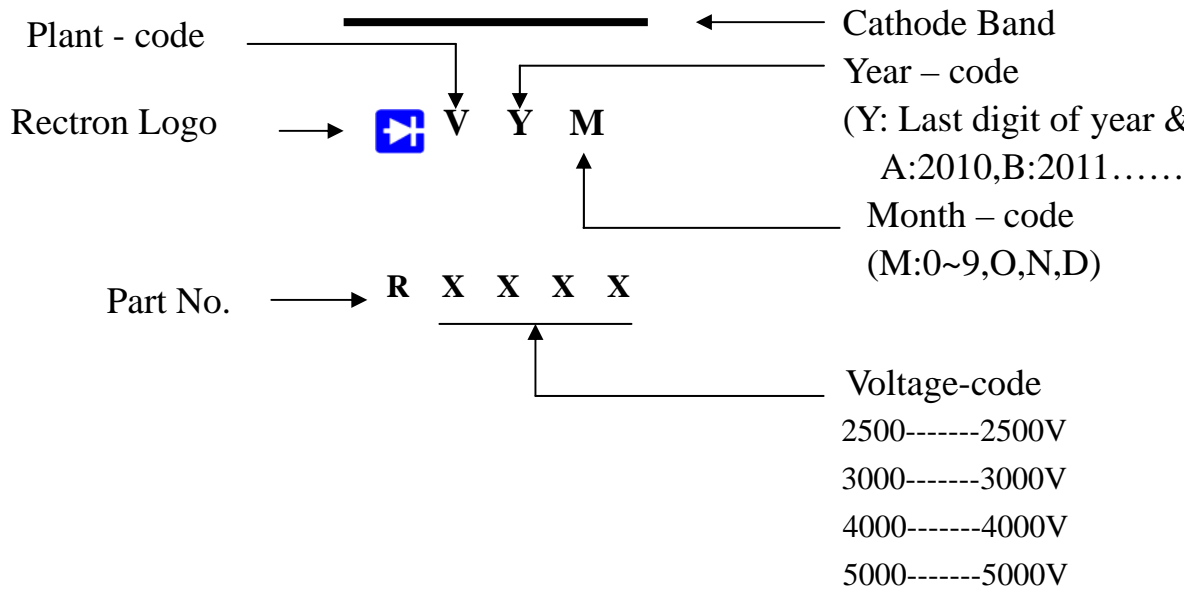


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS





DO-15	-B	500	194*84*21	450*220*255	25,000	12.74
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REEL PACK

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



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