

# SURFACE MOUNT GLASS PASSIVATED HIGH VOLTAGE SILICON RECTIFIER

**VOLTAGE RANGE 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: 0.34 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $^{\circ}\text{C}$  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	R5000G	UNITS					
Maximum Recurrent Peak Reverse Voltage	VRRM	5000	Volts					
Maximum RMS Volts	VRMS	3500	Volts					
Maximum DC Blocking Voltage	VDC	5000	Volts					
Maximum Average Forward Rectified Current at TA = 50°C	lo	200	mAmps					
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30	Amps					
Typical Current Squared Time	l <sup>2</sup> t	3.735	A <sup>2</sup> S					
Turing Thomas Decistors	RθJA	65						
Typical Thermal Resistance	RθJL	30	°C/W					
Typical Junction Capacitance (Note)	Cı	30	pF					
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150	۰C					

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

		-		
CHARACTERIST	ICS	SYMBOL	R5000G	UNITS
Maximum Instantaneous Forward Voltage	at 0.2A DC	VF	4.0	Volts
Maximum DC Reverse Current	@TA = 25°C		5.0	uAmps
at Rated DC Blocking Voltage @TA =150°C		lR .	5.0	mAmps
Maximum Full Load Reverse Current Average, Full Cycle				·
.375", (9.5mm) lead length at TL = 75°C			30	uAmps

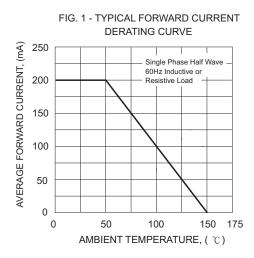
NOTES: 1.Measured at 1 MHz and applied reverse voltage of 4.0 volts.

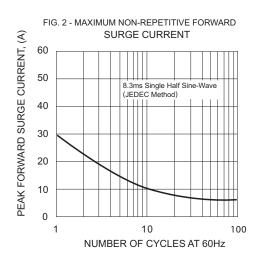
2. "ROHS compliant".3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

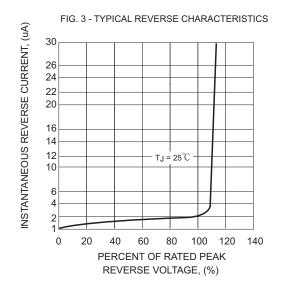
DO-41 .034(0.86) DIA

> 2018-11 REV: B

# RATING AND CHARACTERISTIC CURVES (R5000G)

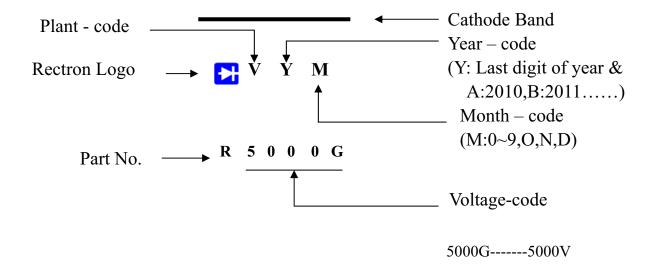








# **Marking Description**



# 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-41	-B	1,000	194*75*21	415*220*255	50,000	16.2

### 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-41	-T	5,000	5,000	5.0	52	330	355*350*335	20,000	10.49

### 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-41	-F	3,000	5.0	52	255*73*100	400*268*225	30,000	13.0
DO-41	-E	3,000	5.0	26	256*48*94	365*270*217	42,000	12.41



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