

**GLASSPASSIVATED HIGH VOLTAGE
FAST RECOVERY RECTIFIER**
VOLTAGE RANGE 1600 Volts CURRENT 1.0 Ampere

FEATURES

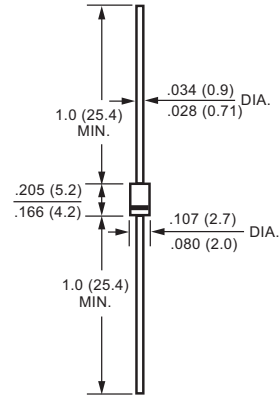
- *Fast switching
- *Low reverse leakage
- *High current capability
- *High surge capability
- *High reliability
- *Glass passivated junction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any



DO-41



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%.

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

RATINGS	SYMBOL	R1600HG	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	1600	Volts
Maximum RMS Volts	VRMS	1120	Volts
Maximum DC Blocking Voltage	VDC	1600	Volts
Maximum Average Forward Rectified Current	Io	1.0	Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30	Amps
Typical Current Squared Time	I ² t	3.74	A ² S
Typical Thermal Resistance (Note 1)	RθJA	53	°C/W
Typical junction capacitance (Note 2)	Cj	15	pF
Operating and Storage Temperature Range	Tj, TSTG	-65 to + 150	°C

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

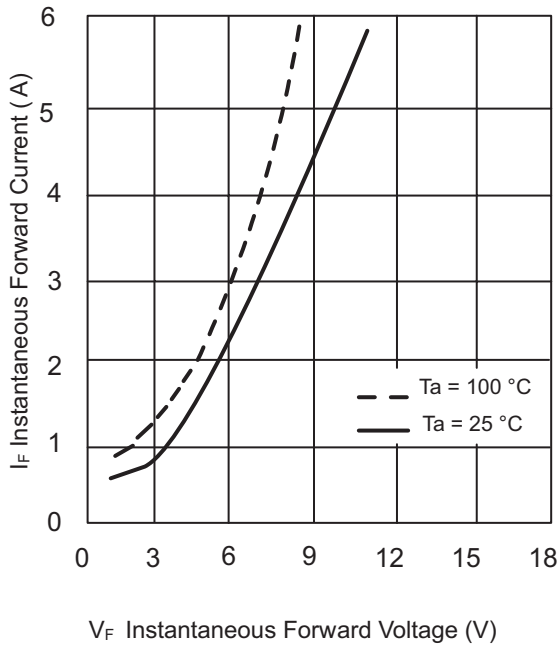
CHARACTERISTICS	SYMBOL	R1600HG	UNITS	
Maximum Instantaneous Forward Voltage at 1.0A DC	VF	3.4	Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	TA = 25°C	3.0	uAmps
		TA = 125 °C	100	uAmps
Maximum Reverse Recovery Time(Note 3)	trr	75	nSec	

NOTES : 1. Thermal Resistance : Mounted on PCB.
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Test Conditions: IF = 0.5A, IR = -1.0A, IRR = -0.25A

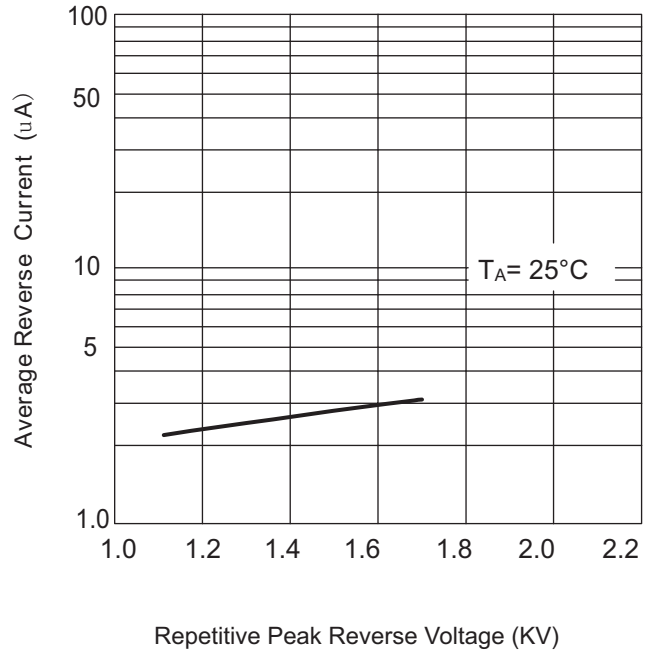
2022-06/25
REV:A

RATINGS AND CHARACTERISTIC CURVES (R1600HG)

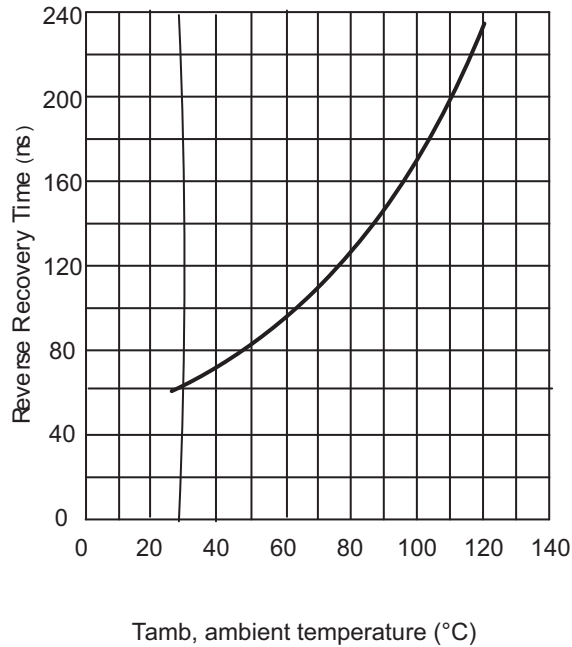
TYPICAL FORWARD CHARACTERISTIC



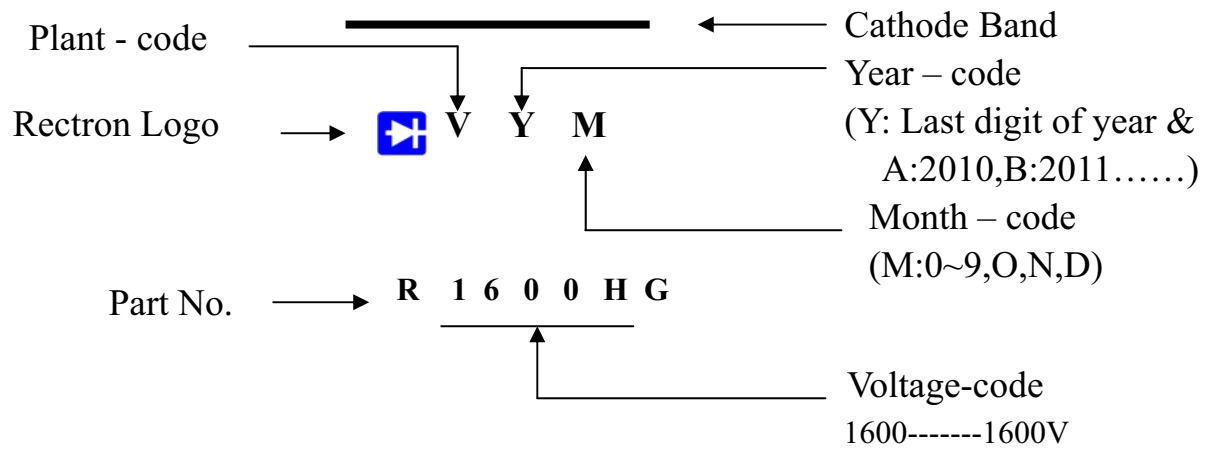
REVERSE CHARACTERISTIC [VR-IR]



REVERSE RECOVERY TIME CHARACTERISTIC [Ta-Trr]



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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