

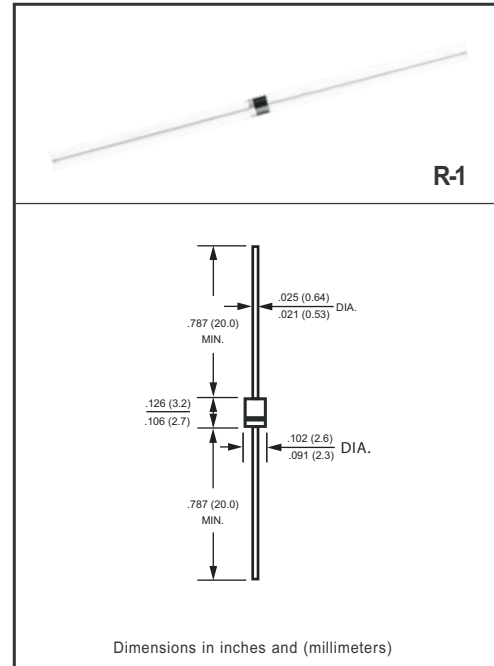
**GLASS PASSIVATED SUPER FAST RECTIFIER**  
VOLTAGE RANGE 50 to 200 Volts CURRENT 1.0 Ampere

**FEATURES**

- \* Glass passivated device
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.12 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.  
resistive or inductive load.

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

RATINGS	SYMBOL	1E1	1E2	1E3	1E4	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	150	200	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> = 55°C	I <sub>O</sub>	1.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	25				Amps
Current Squared Time	I <sup>2</sup> t	2.5				A <sup>2</sup> Sec
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub>	100				°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150				°C

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

CHARACTERISTICS	SYMBOL	1E1	1E2	1E3	1E4	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC	V <sub>F</sub>	0.95				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C	5.0				uAmps
	@T <sub>A</sub> = 100°C	100				
Maximum Reverse Recovery Time (Note 1)	t <sub>rr</sub>	35				nSec

NOTES : 1. Reverse Recovery Test Conditions: I<sub>F</sub> = 0.5A, I<sub>R</sub> = -1.0A, I<sub>RR</sub> = -0.25A  
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".  
3. Thermal Resistance : Mounted on PCB.

2009-09  
REV:A

## RATING AND CHARACTERISTICS CURVES ( 1E1 THRU 1E4 )

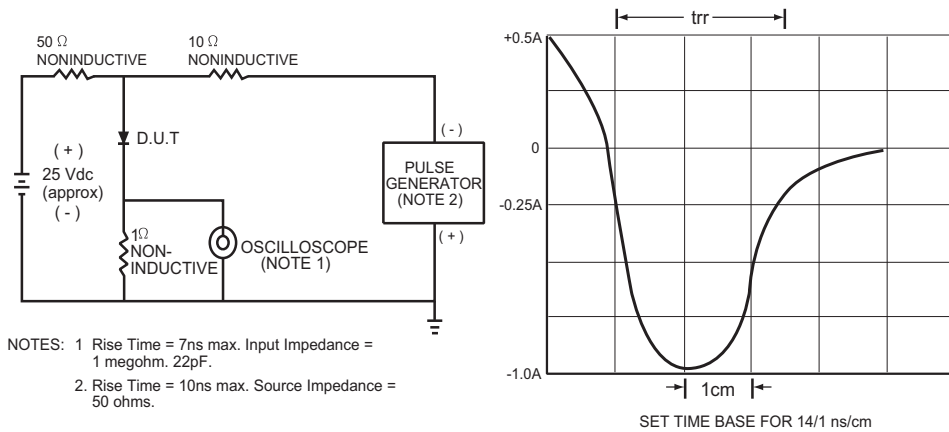


FIG.1 TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

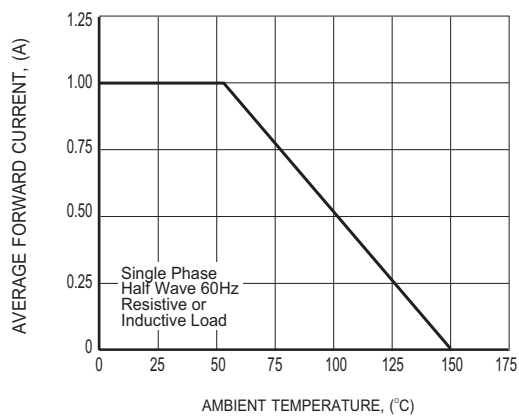


FIG.2 TYPICAL FORWARD CURRENT DERATING CURVE

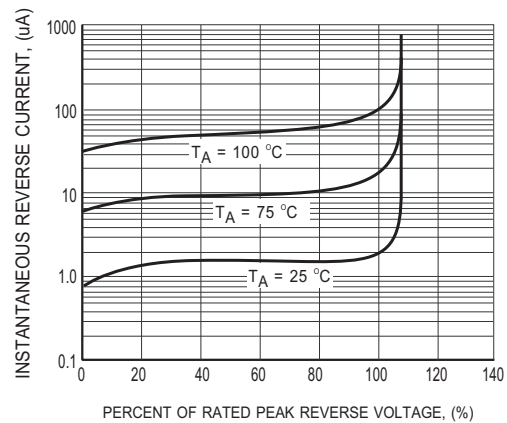
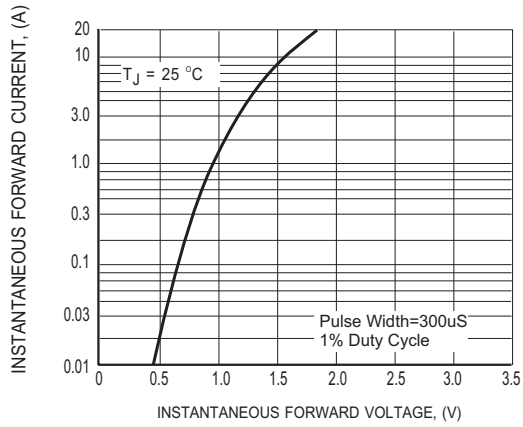
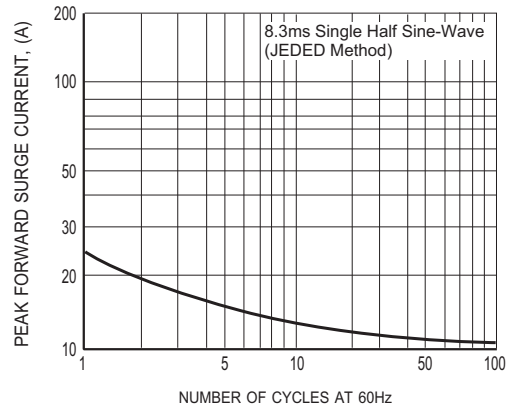


FIG.3 TYPICAL REVERSE CHARACTERISTICS

## RATING AND CHARACTERISTICS CURVES (1E1 THRU 1E4 )

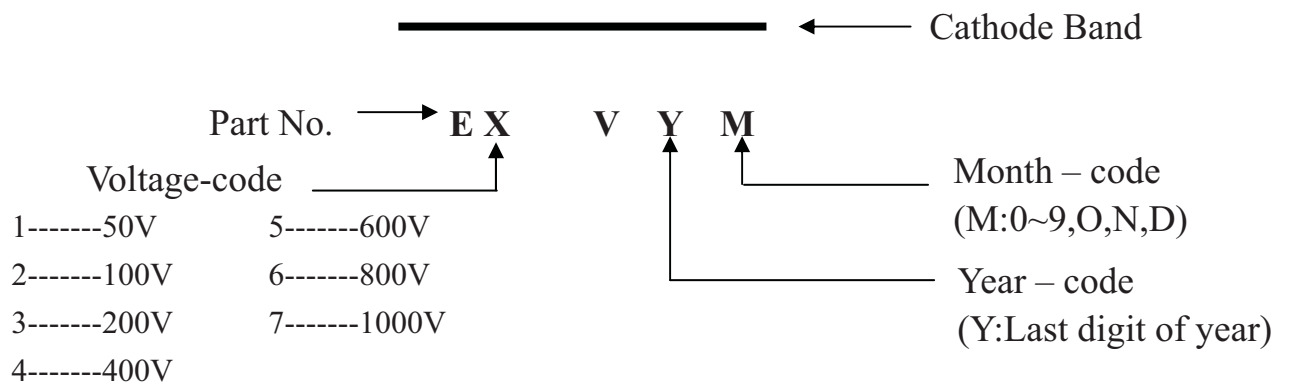


**FIG.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

## Marking Description



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### 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)
R-1	-T	5,000	5,000	5.0	52	330	355*350*335	20,000	7.37

### AMMO PACK

PACKAGE	PACKING CODE	REEL ( EA )	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON ( EA )	GROSS WEIGHT (Kg)
R-1	-F	3,000	5.0	52	255*73*100	400*268*225	30,000	8.5
R-1	-E	3,000	5.0	26	256*48*94	365*270*217	42,000	8.35
R-1	-J	3,000	12.7	---	325*170*40	355*350*335	42,000	13.93
R-1	-I	2,000	12.7	---	325*170*40	355*350*335	28,000	9.69

### BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
R-1	-B	1000	192*75*21	415*220*255	50,000	11.74