



50ns ULTRA-FAST RECOVERY
HIGH -VOLTAGE RECTIFIER DIODES

- PRV to 7,000 Volts
- 50ns ultra-fast recovery
- Small size
- Exceptionally low leakage
- High surge capability
- Avalanche characteristics



PRV	3000	4000	5000	6000	7000
EDI type	RUSH103	RUSH104	RUSH105	RUSH106	RUSH107

ELECTRICAL CHARACTERISTICS (at T_A =25 °C Unless Otherwise Specified)

Average Rectified Forward Current @ 50°C, I _O (Fig.1)	200 mA
Max. Peak Surge Current, I _{FSM} (8.3ms)	8 Amp
Max. Reverse Recovery, T _{rr} , Fig.4	50ns
Max. Forward Voltage Drop @ 200 mA, V _F	15 Volts
Max. DC Reverse Current @ PRV and 25°C, I _R	1 μA
Max. DC Reverse Current @ PRV and 100°C, I _R	25 μA
Ambient Operating Temperature Range, T _A	-55 to +150 °C
Storage Temperature Range, T _{STG}	-55 to +150 °C

NOTES:

- 1.It is recommended that a proper heat sink be used on the terminals of this device between the body and soldering point to prevent damage from excess heat.
- 2.If operated over 10,000v/inch in length, devices should be immersed in oil or re - encapsulated.

EDI reserves the right to change these specifications at any time without notice.

FIG.1

OUTPUT CURRENT vs AMBIENT TEMPERATURE

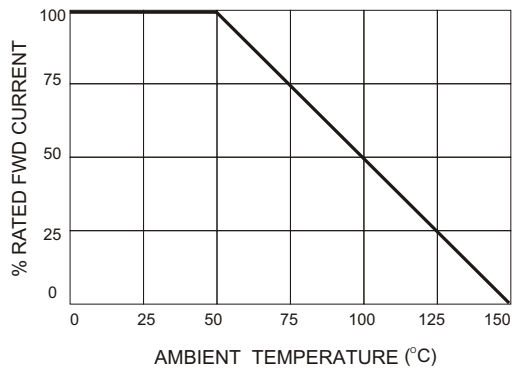


FIG.2

NON-REPETITIVE SURGE CURRENT

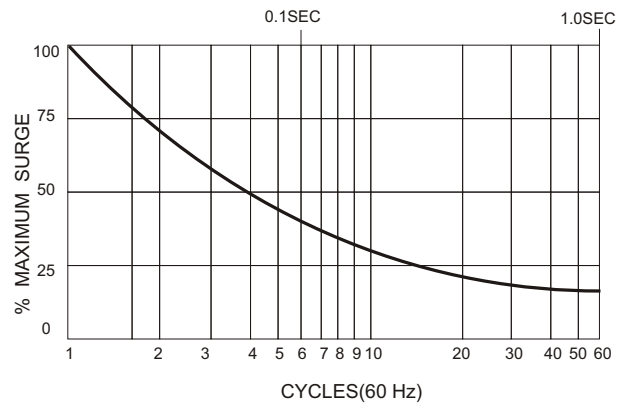
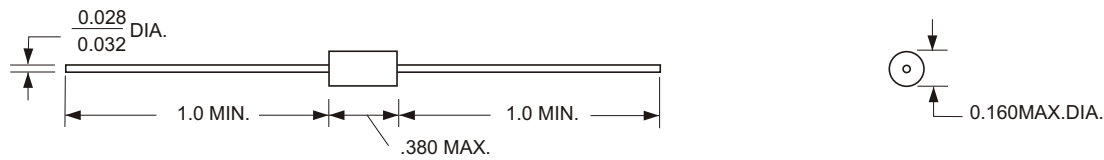


FIG.3

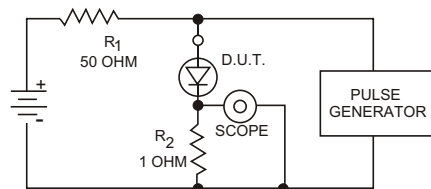
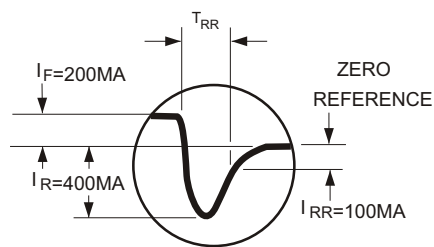


ALL DIMENSIONS IN INCHES

Maximum lead and terminal temperature for soldering, 3/8 inch form case, 5 seconds at 250°C

FIG.4
TEST CIRCUIT

TYPICAL REVERSE RECOVERY WAVEFORM



R_1, R_2 NON-INDUCTIVE RESISTORS
PULSE GENERATOR-HEWLETT PACKARD 214A OR EQUIV.
1KC REP.RATE, 10 μ SEC. PULSE WIDTH
ADJUST PULSE AMPLITUDE FOR PEAK I_R

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ELECTRONIC DEVICES, INC. DESIGNERS AND MANUFACTURERS OF SOLID STATE DEVICES SINCE 1951.

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