



50ns ULTRA-FAST RECOVERY  
HIGH VOLTAGE RECTIFIER DIODES

- PIV to 10,000 Volts
- 50ns ultra-fast recovery
- Small size
- Exceptionally low leakage
- High surge capability
- Avalanche characteristics



PRV	8 KV	10KV
EDI SERIES	RUST2008	RUST2010

ELECTRICAL CHARACTERISTICS (at T<sub>A</sub>=25 °C Unless Otherwise Specified)

Average Rectified Forward Current @ 50°C, I <sub>o</sub> (Fig1)	100 mA
Max. Peak Surge Current, I <sub>FSM</sub> (8.3ms) (Fig.2)	5 Amp
Max. Reverse Recovery, T <sub>rr</sub> , Fig.4	50ns
Max. Forward Voltage Drop @ 100 mA, V <sub>F</sub>	26 Volts
Max. DC Reverse Current @ PRV and 25°C, I <sub>R</sub>	1 μA
Max. DC Reverse Current @ PRV and 100°C, I <sub>R</sub>	25 μA
Ambient Operating Temperature Range, T <sub>A</sub>	-55 to +150 °C
Storage Temperature Range, T <sub>STG</sub>	-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.

# RUST

FIG.1

OUTPUT CURRENT vs AMBIENT TEMPERATURE

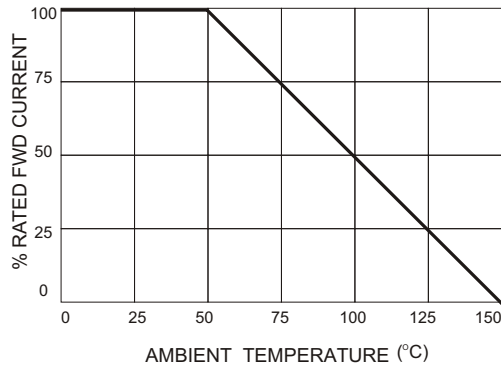


FIG.2

NON-REPETITIVE SURGE CURRENT

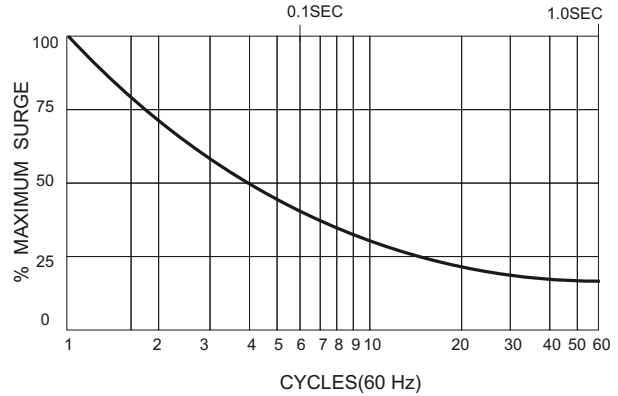
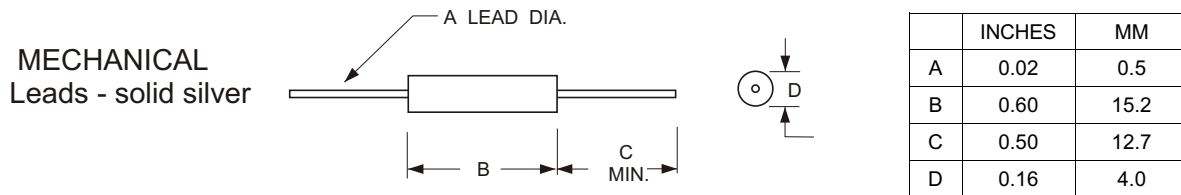


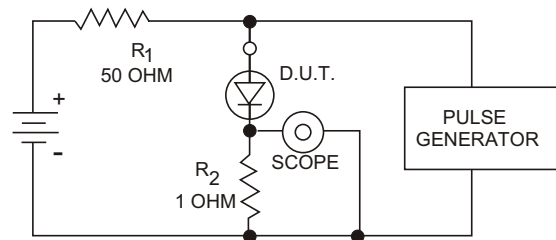
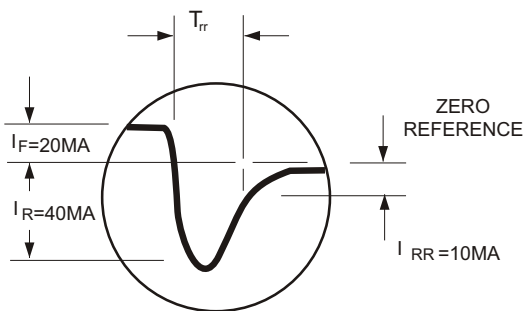
FIG.3



TEST CIRCUIT

FIG.4

TYPICAL REVERSE RECOVERY WAVEFORM



$R_1, R_2$  NON-INDUCTIVE RESISTORS  
 PULSE GENERATOR-HEWLETT PACKARD 214A OR EQUIV.  
 IKC REP.RATE,  $10 \mu$  SEC. PULSE WIDTH  
 ADJUST PULSE AMPLITUDE FOR PEAK  $I_R$

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