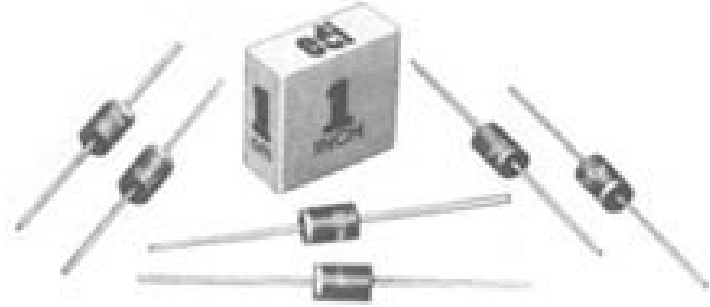




3W 3RW

HIGH VOLTAGE, HIGH CURRENT, FAST RECOVERY  
SILICON RECTIFIER DIODES

- Up to 250 ns max. recovery
- Small size
- Exceptionally low leakage
- Avalanche characteristics



EDI Type	PRV Voits	REVERSE RECOVERY TIME (Fig.4)
3W2	2,000	Not applicable
3W2.5	2,500	Not applicable
3W3	3,000	Not applicable
3RW2	2,000	250 ns max.
3RW2.5	2,500	250 ns max.
3RW3	3,000	250 ns max.

ELECTRICAL CHARACTERISTICS(at  $T_A=25^{\circ}\text{C}$  Unless Otherwise Specified)

ELECTRICAL CHARACTERISTICS	3W	SERIES 3RW	SERIES
Average Rectified Forward Current @ $50^{\circ}\text{C}$ , $I_o$ (Fig.1)	2 Amp	1.5 Amp	
Max. Peak Surge Cureent, $I_{FSM}$ (8.3 ms) (Fig.2)	300 Amp	200 Amp	
Max.Forward Voltage Drop @ 2.0 A, $V_F$	3VDC max.	4VDC max.	
Max. DC Reverse Current @ PRV and $25^{\circ}\text{C}$ , $I_R$	5 $\mu\text{A}$	10 $\mu\text{A}$	
Max. DC Reverse Current @ PRV and $100^{\circ}\text{C}$ , $I_R$	150 $\mu\text{A}$	200 $\mu\text{A}$	
Ambient Operating Temperature Range, $T_A$	$-55^{\circ}\text{C}$ to $+150^{\circ}\text{C}$	$-55^{\circ}\text{C}$ to $+125^{\circ}\text{C}$	
Storage Temperature Range, $T_{STG}$	$-55^{\circ}\text{C}$ to $+150^{\circ}\text{C}$		

NOTES: 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.

Maximum lead and terminal temperature for soldering, 3/8 inch from case, 5 seconds at  $250^{\circ}\text{C}$

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

# 3W 3RW

FIG.1  
OUTPUT CURRENT vs AMBIENT TEMPERATURE

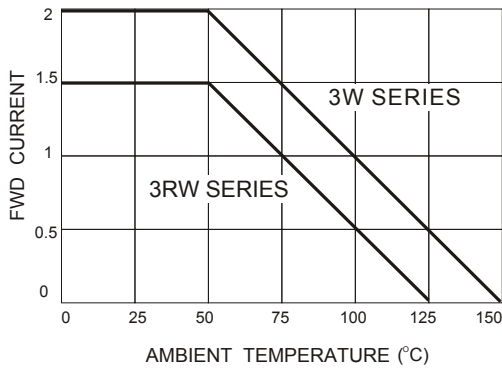


FIG.2  
NON-REPETITIVE SURGE CURRENT

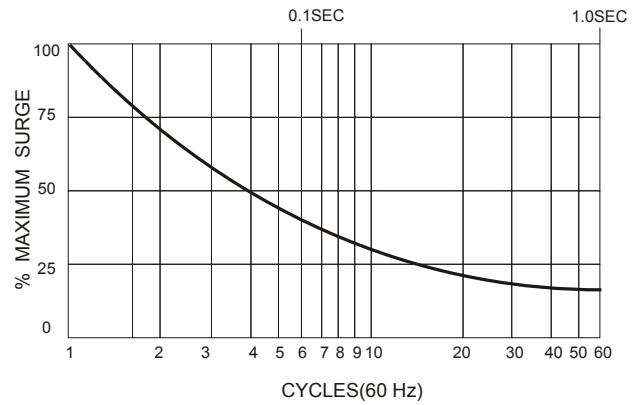
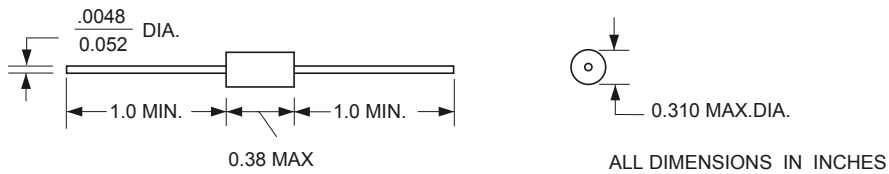


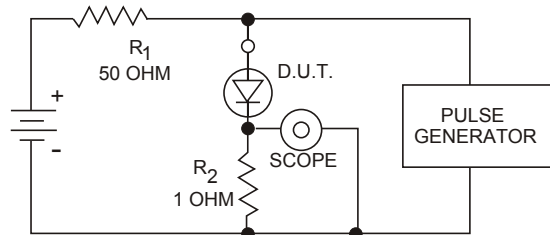
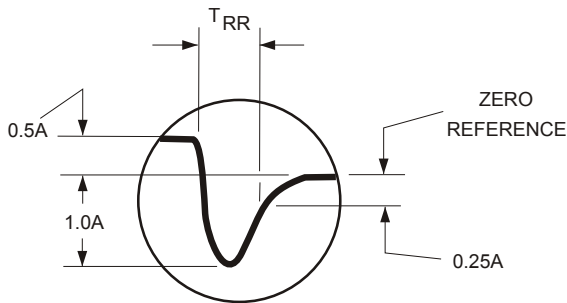
FIG.3



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

TEST CIRCUIT  
FIG.4

TYPICAL REVERSE RECOVERY WAVEFORM



R<sub>1</sub>, R<sub>2</sub> NON-INDUCTIVE RESISTORS  
PULSE GENERATOR-HEWLETT PACKARD 214A OR EQUIV.  
IKC REP.RATE, 10 μ SEC. PULSE WIDTH  
ADJUST PULSE AMPLITUDE FOR PEAK I<sub>R</sub>