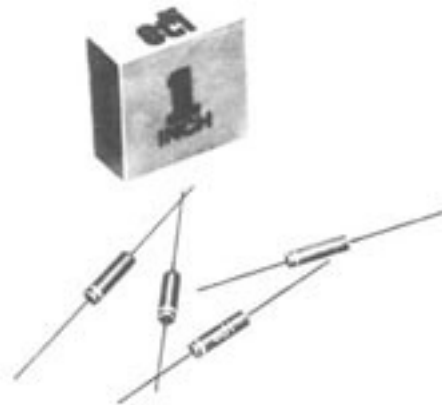




HTDR-3

300 NANOSECOND AT 200 °C HIGH TEMPERATURE- FAST RECOVERY HIGH VOLTAGE RECTIFIER DIODES

- Exceptional high temperature Stability up to 200 °C
- Exceptionally low leakage
- Small size
- 3KV PRV



Our proprietary diffusion and passivation process provides this unusual stability and no leakage drift at these elevated temperatures. All diodes are subjected to 10 temperature cycles from -55 °C to + 200 °C.

EDI TYPE NO.	PEAK REVERSE VOL TAGE	DIMENSIONS
HTDR-3	3,000	See Fig.2

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

Average Rectified Forward Current @ 50 °C, I _O	50 mA
Average Rectified Forward Current @ 200 °C, I _O	1 mA
Max DC Reverse Current @ PRV @ 25 °C, I _R	0.1 μA Max
Max DC Reverse Current @ PRV @ 200 °C, I _R (See Note:1)	30 μA max 18 μA typical
Max Reverse Recovery, T _{rr} (See Fig.1 and 3)	50ns.max at 25 °C 300ns.max at 200 °C
Max. Fwd. Voltage Drop at 25 °C and 10ma ,V _F	25 Max V
Forward Stability T _j 200 °C	(See Note 2)
Ambient Operating and Storage Temperature Range	-55 °C to +200 °C

Note 1: I_R at 200 °C readings are taken in oil after voltage has been applied to device for 5 minutes.

Note 2: All diodes are hot forward swept for forward stability to maximum temperature of 200 °C on dynamic display on curve trace oscilloscope.

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

Figure 1
REVERSE RECOVERY vs TEMPERATURE

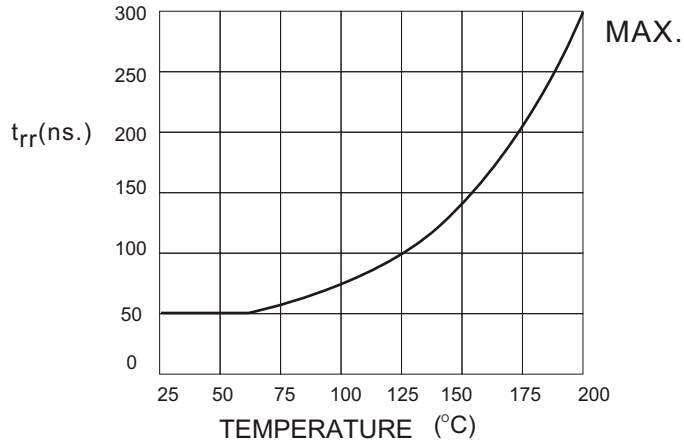
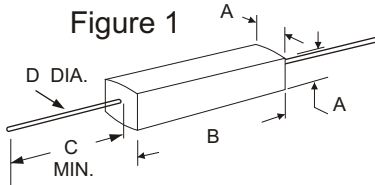


Figure 2
DIMENSIONS

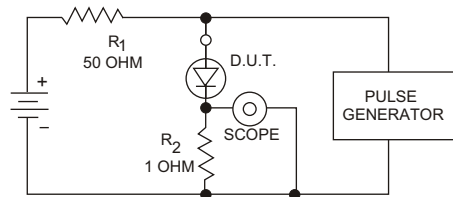
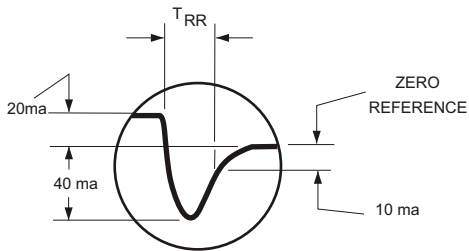


DIMENSIONS				
INCHES		MILLMETERS		
Min.	Max.	Min.	Max.	
A	.095	.125	2.41	3.17
B	.380	.420	9.65	10.66
C	.500	-	10.27	-
D	.016	.020	0.40	0.51

Longer leads available. Consult factory.
Maximum lead and terminal temperature for soldering, 3/8 inch from case, 5 seconds at 250 °C.

Figure 3
TYPICAL REVERSE RECOVERY WAVE FORM

TYPICAL REVERSE RECOVERY WAVEFORM



R₁, R₂ NON-INDUCTIVE RESISTORS
PULSE GENERATOR - HEWLETT PACKARD 214A OR EQUIV
IKC REP.RATE, 10 μ SEC. PULSE WIDTH
ADJUST PULSE AMPLITUDE FOR PEAK I_R