

100 mA SILICON CARTRIDGE RECTIFIERS

SMALL SIZE MOLDED PACKAGE

PRV 8,000 TO 60,000 VOLTS

FAST RECOVERY (RTD SERIES)

LOW LEAKAGE



EDI Type Number	Peak Reverse Voltage PRV (Volts)	Max. Forward Voltage Drop at 25°C and 100 mA V_F (Volts)	Length "L" Fig. 3
STANDARD RECOVERY			
BCD08	8,000	13	1.00
BCD10	10,000	13	1.00
BCD12	12,000	13	1.00
BCD15	15,000	20	1.63
BCD20	20,000	26	2.13
BCD25	25,000	33	2.63
BCD30	30,000	40	3.13
BCD35	35,000	46	3.63
BCD40	40,000	53	4.13
BCD45	45,000	60	4.63
BCD50	50,000	66	5.13
BCD60	60,000	73	5.63
200 NANOSECOND RECOVERY (FIG 4)			
RTD08	8,000	20	1.00
RTD10	10,000	20	1.00
RTD12	12,000	20	1.00
RTD15	15,000	30	1.63
RTD20	20,000	40	2.13
RTD25	25,000	50	2.63
RTD30	30,000	60	3.13
RTD35	35,000	70	3.63
RTD40	40,000	80	4.13
RTD45	45,000	90	4.63
RTD50	50,000	100	5.13
RTD60	60,000	110	5.63

ELECTRICAL CHARACTERISTICS at $T_A = 25^\circ\text{C}$ Unless Otherwise Specified	BCD SERIES STANDARD RECOVERY
Max. DC Reverse Current @PRV and 25°C , I_R	2 μA
Max. DC Reverse Current @PRV and 100°C , I_R	100 μA
Ambient Operating Temperature Range, T_A	-55°C to $+125^\circ\text{C}$
Storage Temperature Range, T_{STG}	-55°C to $+150^\circ\text{C}$
Max. One-Half Cycle Surge Current, I_{FM} (Surge) @ 60 Hz	10 Amps
Forward Current Repetitive Peak, I_{FRM}	3 Amps

ELECTRICAL CHARACTERISTICS at $T_A = 25^\circ\text{C}$ Unless Otherwise Specified	RTD SERIES FAST RECOVERY
Max. DC Reverse Current @PRV and 25°C , I_R	2 μA
Max. DC Reverse Current @PRV and 100°C , I_R	100 μA
Max. Reverse Recovery Time, t_{rr} (Fig. 4)	200 nanosec
Ambient Operating Temperature Range, T_A	-55°C to $+125^\circ\text{C}$
Storage Temperature Range, T_{STG}	-55°C to $+150^\circ\text{C}$
Max. One-Half Cycle Surge Current, I_{FM} (Surge) @ 60 Hz	10 Amps
Forward Current Repetitive Peak, I_{FRM}	3 Amps

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



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FIG. 1
OUTPUT CURRENT vs. AMBIENT TEMPERATURE

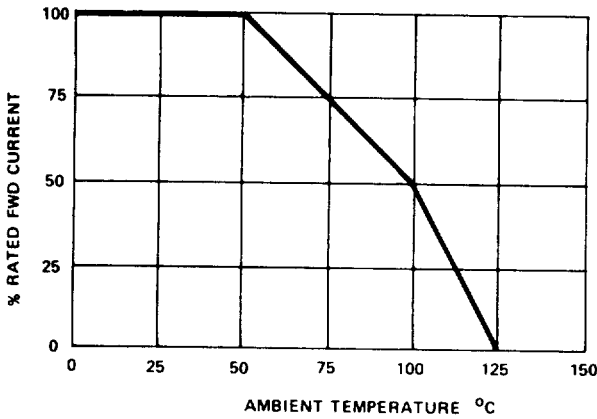


FIG. 2
NON-REPETITIVE SURGE CURRENT RATINGS

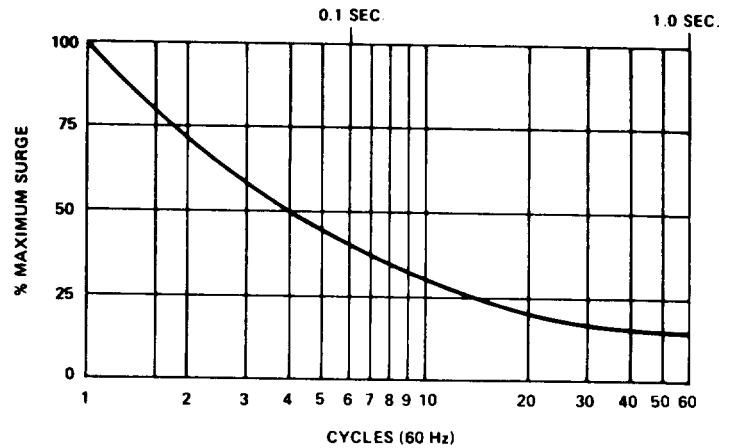
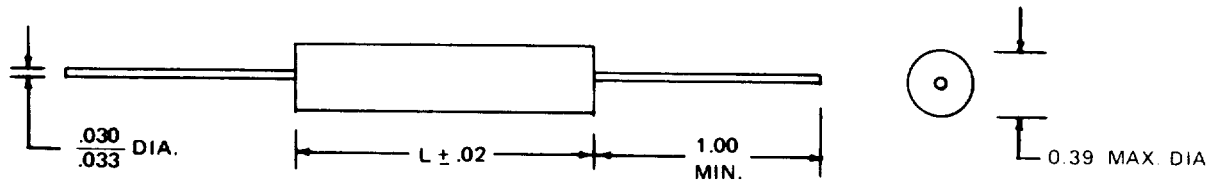


FIG. 3
PACKAGE STYLE



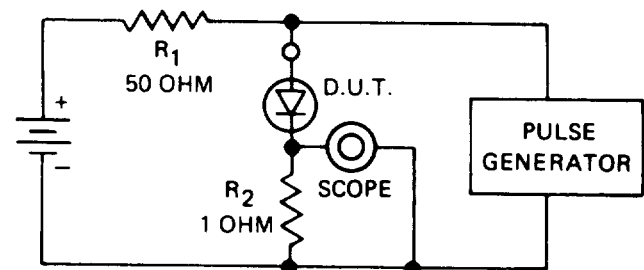
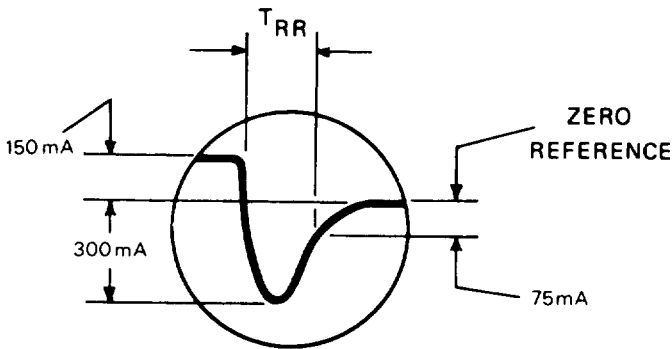
ALL DIMENSIONS IN INCHES

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

TEST CIRCUIT

FIG. 4

TYPICAL REVERSE RECOVERY WAVEFORM



R₁, R₂ 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

Reverse recovery time measured on individual rectifiers prior to assembly.