



BCD RTD

100mA 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 VF (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 | 6.13 |
| 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 | 6.13 |

| ELECTRICAL CHARACTERISTICS (at T _A =25 °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 °C |
| Storage Temperature Range, T _{STG} | -55 °C to +150 °C |
| Max. One-Half Cycle Surge Current, I _{FM} (Surge) @ 60Hz | 10 Amps |
| Forward Current Repetitive Peak, I _{FRM} | 3 Amps |

| ELECTRICAL CHARACTERISTICS (at T _A =25 °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 °C |
| Storage Temperature Range, T _{STG} | -55 °C to +150 °C |
| Max. One-Half Cycle Surge Current, I _{FM} (Surge) @ 60Hz | 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

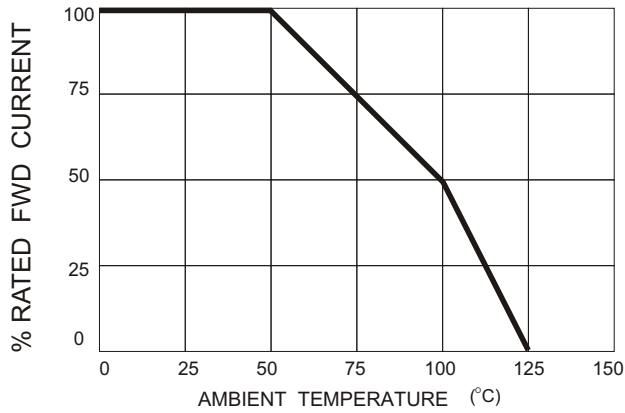


FIG.2
NON-REPETITIVE SURGE CURRENT RATINGS

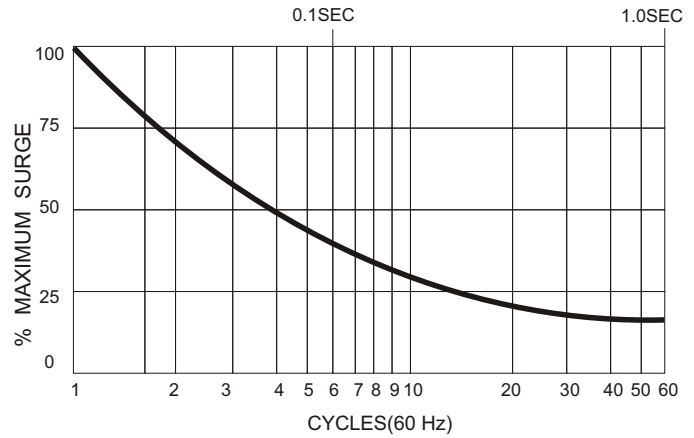
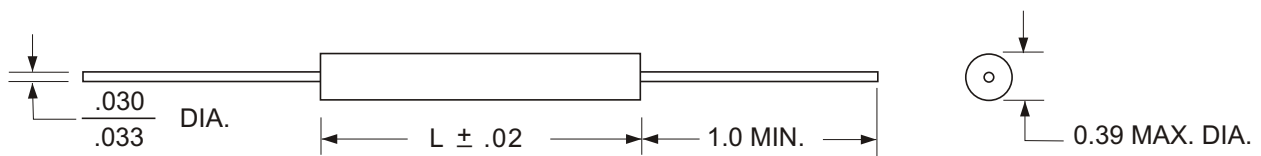


FIG.3
PACKAGE STYLE

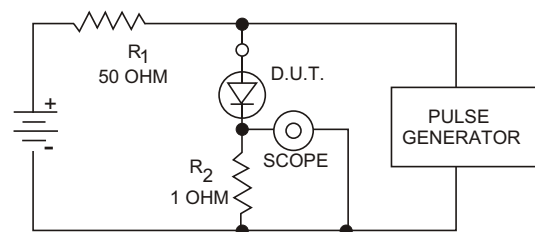
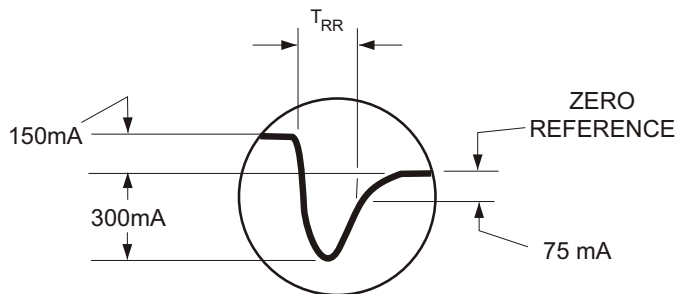


ALL DIMENSIONS IN INCHES

Maximum lead and terminal temperature for soldering, 3/8 inch form 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.
IKC REP.RATE, 10 μ SEC. PULSE WIDTH
ADJUST PULSE AMPLITUDE FOR PEAK I_R

Reverse recovery time measured on individual rectifiers prior to assembly.

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

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