

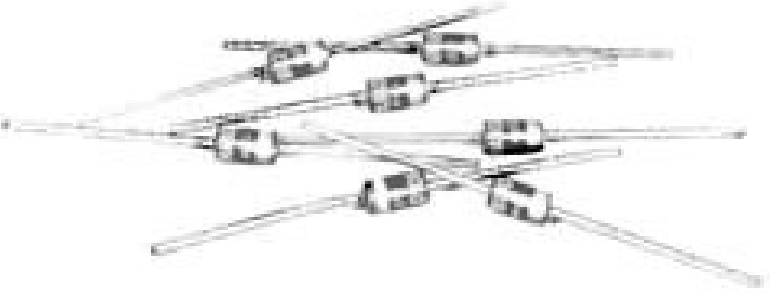


# RAB HAB

---

## 3 AMPERE AXIAL LEAD RECTIFIERS

- PRV TO 1,000 VOLTS
- FAST RECOVERY (RAB SERIES)
- HIGH TEMPERATURE STABILITY
- HIGH SURGE CAPABILITY



| PRV                   | 50V    | 100V   | 200V   | 400V   | 600V   | 800V   | 1000V  |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|
| HAB STANDARD RECOVERY | HAB005 | HAB010 | HAB020 | HAB040 | HAB060 | HAB080 | HAB100 |
| RAB FAST RECOVERY     | RAB005 | RAB010 | RAB020 | RAB040 | RAB060 | RAB080 | RAB100 |

| ELECTRICAL CHARACTERISTICS<br>at $T_A=25^{\circ}\text{C}$ Unless Otherwise<br>Specified | HAB SERIES<br>STANDARD<br>RECOVERY                 |
|---|--|
| Max. DC Reverse Current @ PRV<br>and $25^{\circ}\text{C}$ , $I_R$                       | 5 $\mu\text{A}$                                    |
| Max. DC Reverse Current @ PRV<br>and $100^{\circ}\text{C}$ , $I_R$                      | 150 $\mu\text{A}$                                  |
| Max. Forward Voltage Drop<br>@3.0Amp, $V_F$   | 1.1 Volts  |
| Ambient Operating Temperature<br>Range, $T_A$   | $-55^{\circ}\text{C}$ to<br>$+150^{\circ}\text{C}$ |
| Storage Temperature Range, $T_{STG}$  | $-55^{\circ}\text{C}$ to<br>$+150^{\circ}\text{C}$ |
| Max. One -Half Cycle Surge Current,<br>$I_{FM}(\text{Surge}) @ 60\text{Hz}$             | 300 Amps   |

| ELECTRICAL CHARACTERISTICS<br>at $T_A=25^{\circ}\text{C}$ Unless Otherwise<br>Specified | RAB SERIES<br>FAST<br>RECOVERY                     |
|---|--|
| Max. DC Reverse Current @ PRV<br>and $25^{\circ}\text{C}$ , $I_R$                       | 5 $\mu\text{A}$                                    |
| Max. DC Reverse Current @ PRV<br>and $100^{\circ}\text{C}$ , $I_R$                      | 250 $\mu\text{A}$                                  |
| Max. Forward Voltage Drop<br>@3.0Amp $V_F$  | 1.4 Volts  |
| Max. Reverse Recovery<br>Time, $T_{rr}$ (Fig.4)   | 250 nanosec  |
| Ambient Operating Temperature<br>Range, $T_A$   | $-55^{\circ}\text{C}$ to<br>$+150^{\circ}\text{C}$ |
| Storage Temperature Range, $T_{STG}$  | $-55^{\circ}\text{C}$ to<br>$+150^{\circ}\text{C}$ |
| Max. One -Half Cycle Surge Current,<br>$I_{FM}(\text{Surge}) @ 60\text{Hz}$             | 240 Amps   |

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

FIG.1

OUTPUT CURRENT vs AMBIENT TEMPERATURE

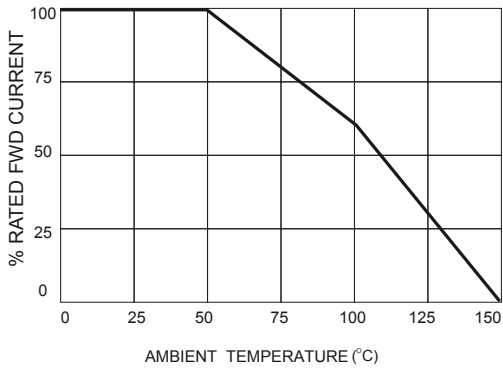


FIG.2

NON-REPETITIVE SURGE CURRENT

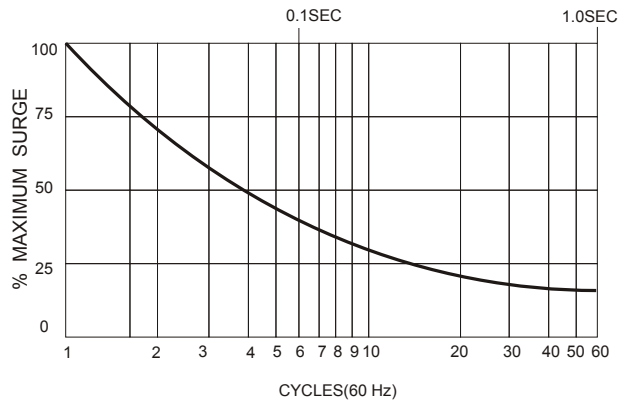
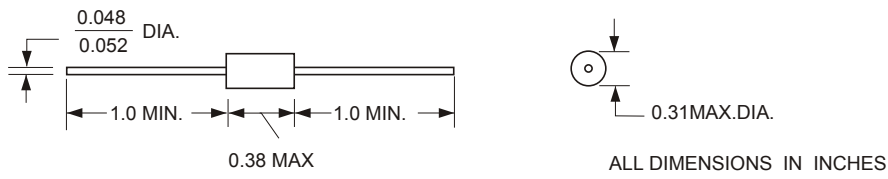


FIG.3

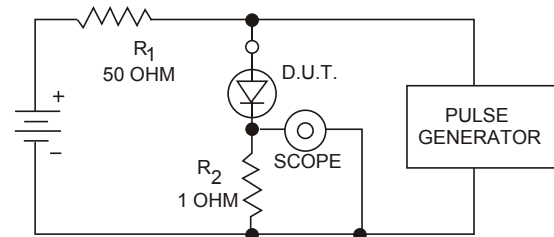
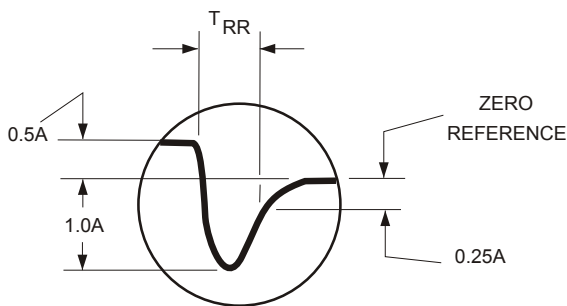


Maximum lead and terminal temperature for soldering, 3/8 inch form case, 5 seconds at 250 °C

## 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.  
1KC REP.RATE, 10 μ SEC. PULSE WIDTH  
ADJUST PULSE AMPLITUDE FOR PEAK I<sub>R</sub>