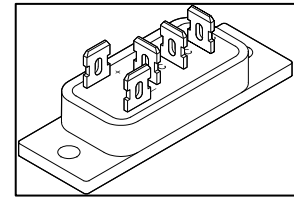


TECHNICAL DATA  
DATA SHEET 4253, REV -

**THREE PHASE FULL WAVE  
BRIDGE RECTIFIER ASSEMBLY**



DESCRIPTION: A 50 VOLT, 5000 NANOSECOND THREE PHASE BRIDGE RECTIFIER ASSEMBLY.

**MAXIMUM RATINGS**

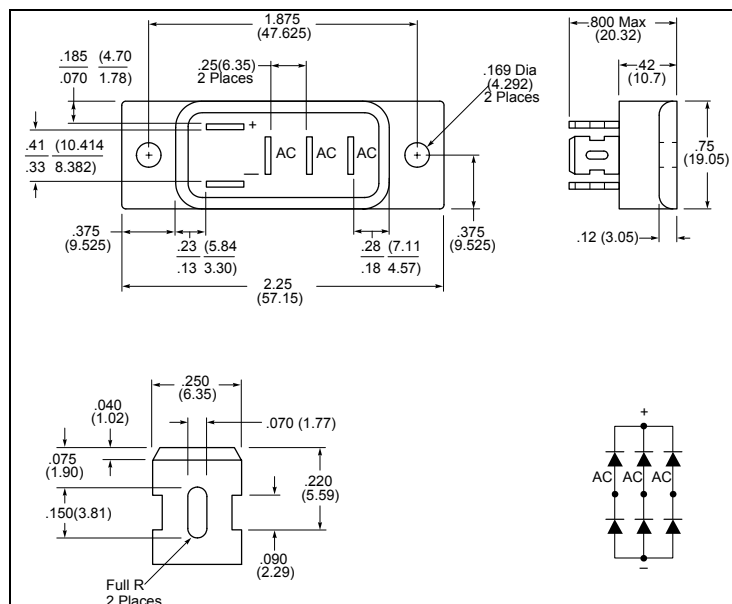
All ratings are at  $T_A = 25^\circ\text{C}$  unless otherwise specified.

| RATING   | CONDITIONS   | MIN | TYP | MAX                 | UNIT               |
|--|--|-----|-----|---------------------|--------------------|
| Peak Inverse Voltage (PIV)                                       | -  | -   | -   | 50                  | Vdc                |
| Average DC Output Current ( $T_C = \text{Case Temp}$ ) ( $I_o$ ) | $T_C = 55^\circ\text{C}$<br>$T_C = 100^\circ\text{C}$<br>$T_C = 125^\circ\text{C}$ | -   | -   | 18.5<br>12.5<br>9.0 | Amps               |
| Average DC Output Current Ambient Temp. (no heat sink) ( $I_o$ ) | $T_A = 25^\circ\text{C}$<br>$T_A = 55^\circ\text{C}$<br>$T_A = 100^\circ\text{C}$  | -   | -   | 6.0<br>5.0<br>3.0   | Amps               |
| Peak Single Cycle Surge Current ( $I_{FSM}$ )                    | $t_p = 8.3 \text{ ms}$ Single Half Cycle Sine Wave, Superimposed On Rated Load     | -   | -   | 150                 | Amps(pk)           |
| Thermal Resistance ( $\theta_{JL}$ )                             | -  | -   | -   | 2.5                 | $^\circ\text{C/W}$ |
| Operating and Storage Temp. ( $T_{op}$ & $T_{stg}$ )             | -  | -55 | -   | +150                | $^\circ\text{C}$   |

**ELECTRICAL CHARACTERISTICS**

| CHARACTERISTICS                                      | CONDITIONS  | MIN | TYP | MAX       | UNIT             |
|--|---|-----|-----|-----------|------------------|
| Maximum Forward Voltage ( $V_f$ )                    | $I_f = 3\text{A}$ (300 $\mu\text{sec}$ pulse, duty cycle < 2%)      | -   | -   | 1.0       | Volts            |
| Maximum Instantaneous Reverse Current At Rated (PIV) | $T_A = 25^\circ\text{C}$<br>$T_A = 100^\circ\text{C}$               | -   | -   | 3.0<br>60 | $\mu\text{Amps}$ |
| Reverse Recovery Time ( $t_{rr}$ )                   | $I_f = 0.5\text{A}$ , $I_r = 1.0\text{A}$ , $I_{rr} = 0.25\text{A}$ | -   | -   | 2000      | nsec             |

**MECHANICAL DIMENSIONS: In Inches / mm**



**FIG. 404**

Note: Case finish - Black Anodized

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