

SINGLE PHASE FULL WAVE BRIDGE RECTIFIER

Qualified per MIL-PRF-19500/469

DESCRIPTION:

This high power single phase full wave bridge series is military qualified per MIL-PRF-19500/469 and is targeted for space, commercial and military aircraft, military vehicles, shipboard markets and all high reliability applications.

✓ FEATURES / BENEFITS

- ✓ Constructed with hermetic diodes
- ✓ All devices are 100% hot solder dipped
- ✓ JANTX/JANTXV available per MIL-PRF-19500/469

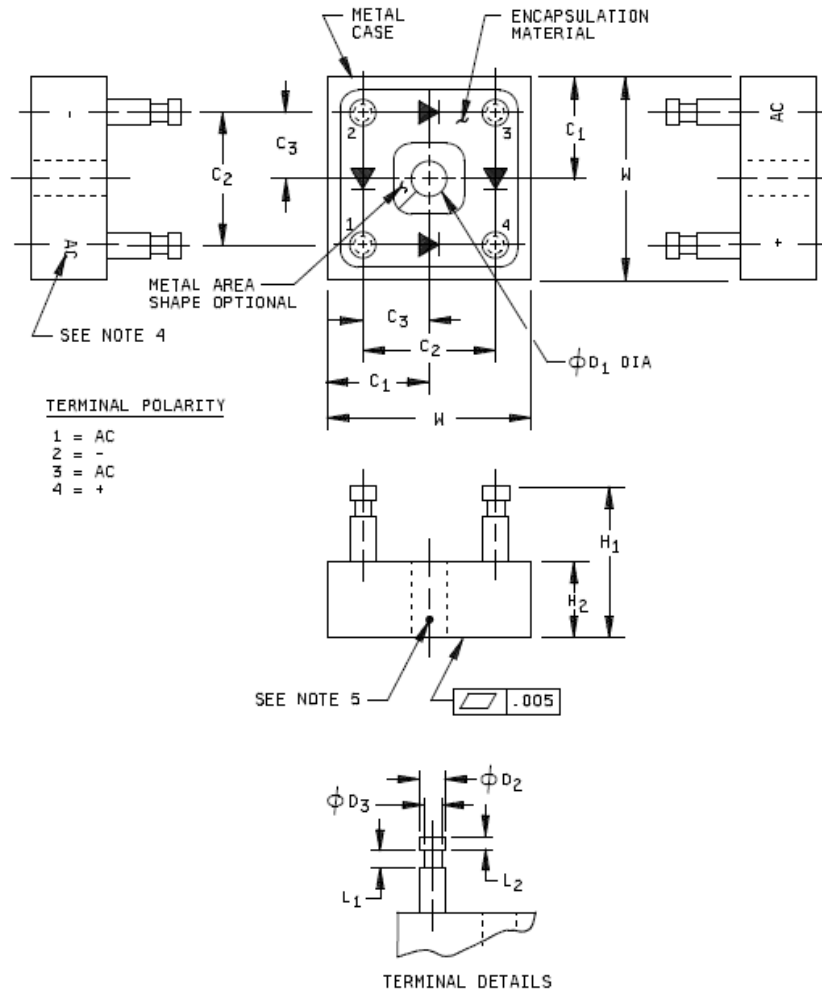
ELECTRICAL CHARACTERISTICS

MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at $T_A = 25^\circ\text{C}$ unless otherwise specified

| RATING | CONDITIONS | MIN | TYP | MAX | UNIT |
|--|---|-----|-----|------|------------------|
| Peak Inverse Voltage (PIV) | -01 | - | - | 200 | Vdc |
| | -02 | | | 400 | |
| | -03 | | | 600 | |
| Average DC Output Current ($T_C = \text{Case Temp}$) (I_o) | $T_C = 55^\circ\text{C}$ | - | - | 10 | Amps |
| | $T_C = 100^\circ\text{C}$ | | | 6.0 | |
| Peak Single Cycle Surge Current (I_{FSM}) | $t_p = 8.3 \text{ ms}$ Single Half Cycle Sine Wave, Superimposed On Rated Load | - | - | 100 | Amps(pk) |
| Maximum Forward Voltage Per Leg (V_f) | $I_f = 15.7 \text{ Adc}$ (300 μsec pulse, duty cycle < 2%) | - | - | 1.35 | Volts |
| Maximum Instantaneous Reverse Current At Rated (PIV) | $T_A = 25^\circ\text{C}$ | - | - | 2.0 | μAmps |
| Reverse Recovery Time (t_{rr}) | $I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$ Measured on discrete rectifiers prior to assembly. | - | - | 2.5 | usec |

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MECHANICAL DIMENSIONS: In Inches / mm



NOTES:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Polarity shall be marked on the bridge body adjacent to terminals. Terminal numbers are for reference and are not required to be marked on the bridge; however, terminal 1 shall be indicated by a mechanical index such as a line or flattened corner, visible from the top (terminal surface) of the device.
4. Point at which T_C is read shall be in metal part of case as shown on drawing.
5. In accordance with ASME Y14.5M, diameters are equivalent to ϕx symbology.

| Ltr | Dimensions | | | |
|----------------|------------|------|-------------|-------|
| | Inches | | Millimeters | |
| | Min | Max | Min | Max |
| C ₁ | .367 | .375 | 9.32 | 9.53 |
| C ₂ | .350 | .450 | 8.89 | 11.43 |
| C ₃ | .175 | .225 | 4.45 | 5.72 |
| ϕD_1 | .139 | .149 | 3.53 | 3.78 |
| ϕD_2 | .091 | .101 | 2.31 | 2.57 |
| ϕD_3 | .066 | .076 | 1.68 | 1.93 |
| H ₁ | | .570 | | 14.48 |
| H ₂ | | .370 | | 9.40 |
| L ₁ | .088 | .098 | 2.24 | 2.49 |
| L ₂ | .020 | .030 | 0.51 | 0.76 |
| W | .735 | .750 | 18.67 | 19.05 |

Fig. 469

Note: Case finish - Black Anodized

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