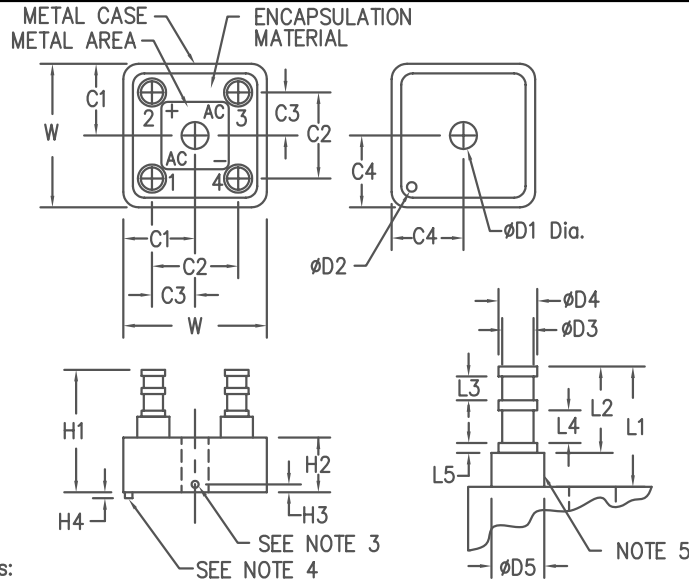


25 Amp Single Phase Bridge Rectifiers

JAN SPA25 to JAN SPD25



Notes:

1. Terminals are hot tin dipped or silver plated.
2. Polarity shall be marked on terminal side of device.
3. Point at which C is read (must be in metal part of case)
4. Locating pin shall be adjacent to positive terminal.
5. Insulating sleeve shall be alumina (AL₂O₃) or equivalent.

| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| C1 | .552 | .572 | 14.02 | 14.53 | |
| C2 | .624 | .760 | 15.85 | 19.30 | |
| C3 | .312 | .380 | 7.92 | 9.65 | |
| C4 | .495 | .512 | 12.57 | 13.00 | |
| ØD1 | .189 | .195 | 4.80 | 4.95 | |
| ØD2 | .057 | .067 | 1.45 | 1.70 | |
| ØD3 | .108 | .118 | 2.74 | 3.00 | |
| ØD4 | .141 | .151 | 3.58 | 3.84 | |
| ØD5 | .225 | .235 | 5.72 | 5.97 | |
| H1 | .669 | 1.060 | 17.53 | 26.92 | |
| H2 | .300 | .500 | 7.62 | 12.70 | |
| H3 | .040 | .060 | 1.02 | 1.52 | |
| H4 | .042 | .062 | 1.07 | 1.57 | |
| L1 | .370 | .560 | 9.40 | 14.22 | |
| L2 | .307 | .365 | 7.80 | 9.27 | |
| L3 | .089 | .099 | 2.26 | 2.49 | |
| L4 | .132 | .142 | 3.35 | 3.61 | |
| L5 | .026 | .036 | .66 | .91 | |
| W | 1.104 | 1.144 | 28.04 | 29.06 | |

| Microsemi Catalog Number | Industry Part Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage |
|--------------------------|----------------------|------------------------------|---------------------------------|
| JAN SPA25 | | 100V | 110V |
| JAN SPB25 | | 200V | 220V |
| JAN SPC25 | | 400V | 440V |
| JAN SPD25 | | 600V | 660V |

- Qualified to MIL-S-19500/446
- Fused-in-glass diodes used
- Controlled Avalanche Characteristics
- High Surge Rating
- Electrically isolated Aluminum case

| Electrical Characteristics | | |
|----------------------------------|------------------------|------------------------------|
| Average D.C. output current | IOAV 25 Amps | TC = 55°C |
| Average D.C. output current | IOAV 15 Amps | TC = 100°C |
| Maximum surge current | IFSM 150 Amps | 8.3ms, half sine, TJ = 55°C |
| Max peak forward voltage per leg | VFM 1.40 Volts | IFM = 39A; TJ = 25°C* |
| Max peak reverse current per leg | IRM 2 µA | VRRM, TJ = 25°C |
| Max peak reverse current per leg | IRM 150 µA | VRRM, TJ = 100°C* |
| Max. recovery time per leg | t _{rr} 2.5 µS | 0.5A, 1.0A, 0.25A |
| Isolation voltage | VISO 2800 Volts | 10 µA DC max for 10sec. 25°C |

*Pulse test: Pulse width 300 µsec, Duty cycle 2%

| Thermal and Mechanical Characteristics | | |
|--|------|---------------------------------|
| Storage temperature range | TSTG | -65°C to 150°C |
| Operating temperature range | TJ | -65°C to 150°C |
| Maximum thermal resistance | RθJC | 2.5°C/W junction to case |
| Maximum thermal resistance per package | RθJA | 20°C/W junction to ambient |
| Weight | | 1.1 ounces (31.5 grams) typical |

10-25-04 Rev. 1

JAN SPA25 to JAN SPD25

Figure 1
Typical Forward Characteristics – Per Leg

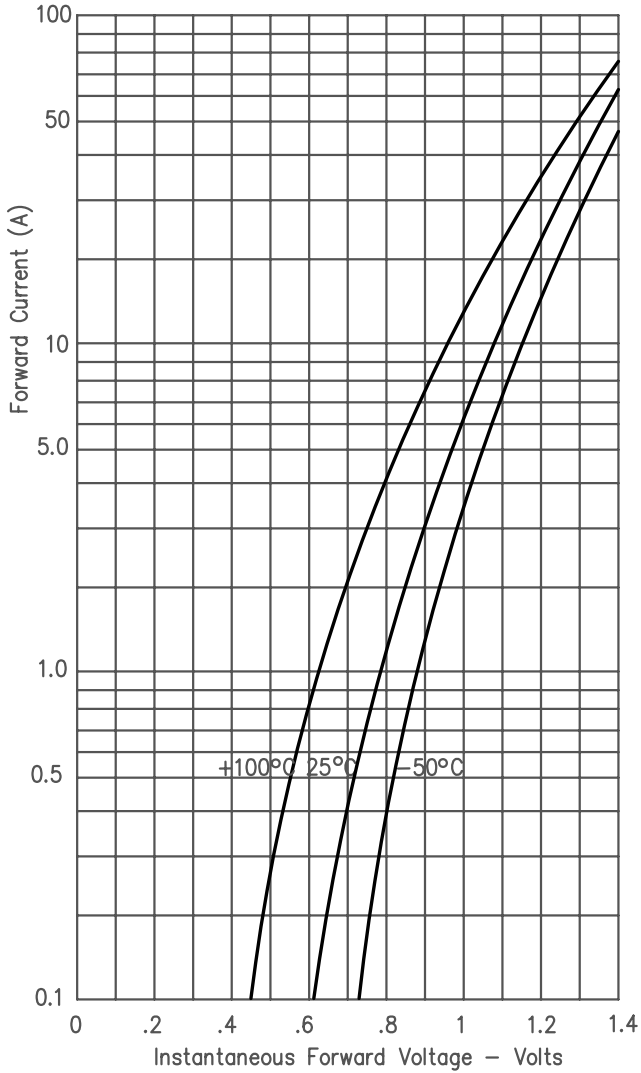


Figure 3
Current Derating

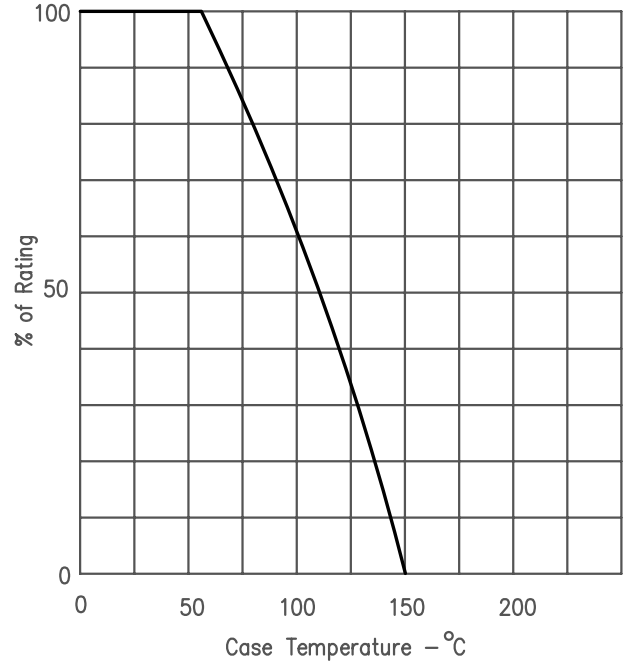


Figure 2
Typical Reverse Leakage Current – Per Leg

