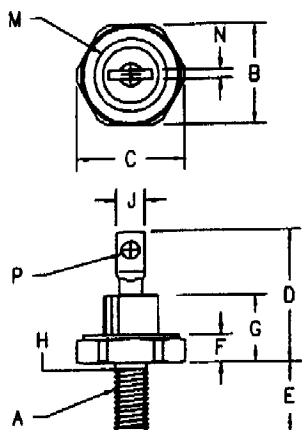


## Silicon Avalanche Power Rectifiers

## 1N1202A - 1N1206A 1N3671A - 1N3673A



- Notes:
1. 10-32 UNF3A
  2. Full threads within 2 1/2 threads
  3. Standard Polarity: Stud is Cathode  
Reverse Polarity: Stud is Anode

| Dim. | Inches  |         | Millimeter |         | Notes |
|------|---------|---------|------------|---------|-------|
|      | Minimum | Maximum | Minimum    | Maximum |       |
| A    | ---     | ---     | ---        | ---     | 1     |
| B    | .424    | .437    | 10.77      | 11.10   |       |
| C    | ---     | .505    | ---        | 12.83   |       |
| D    | ---     | .800    | ---        | 20.32   |       |
| E    | .422    | .453    | 10.72      | 11.51   |       |
| F    | .075    | .175    | 1.91       | 4.44    |       |
| G    | ---     | .405    | ---        | 10.29   |       |
| H    | .163    | .189    | 4.15       | 4.80    | 2     |
| J    | .100    | .140    | 2.54       | 3.56    |       |
| M    | ---     | .350    | ---        | 8.89    | Dia   |
| N    | .020    | .065    | .510       | 1.65    |       |
| P    | .070    | .100    | 1.78       | 2.54    | Dia   |

### D0203AA (D04)

- MIL-PRF-19500/260
- Glass passivated die
- Glass to metal seal construction
- 240 Amps surge rating
- $V_{RRM}$  to 1000 volts

| Standard | Number   | Reverse | Peak Reverse Voltage |
|----------|----------|---------|----------------------|
| 1N1202A  | 1N1202AR | Reverse | 200V                 |
| 1N1204A  | 1N1204AR | Reverse | 400V                 |
| 1N1206A  | 1N1206AR | Reverse | 600V                 |
| 1N3671A  | 1N3671AR | Reverse | 800V                 |
| 1N3673A  | 1N3673AR | Reverse | 1000V                |

### Electrical Characteristics

|                                     |                              |   |
|-------------------------------------|------------------------------|---|
| Average forward current             | $I_F(AV)$ 12 Amps            | $T_C = 150^\circ C$ , half sine wave, $R_{\theta JC} = 2.0^\circ C/W$ |
| Maximum surge current               | $I_{FSM}$ 240 Amps           | 8.3ms, half sine, $T_C = 200^\circ C$                                 |
| Max $I^2 t$ for fusing              | $I^2 t$ 240 A <sup>2</sup> s |   |
| Max peak forward voltage            | $V_{FM}$ 1.35 Volts          | $I_{FM} = 38A; T_J = 25^\circ C$                                      |
| Max peak reverse current            | $V_{RM}$ 2.30 Volts          | $I_{FM} = 240A; T_J = 25^\circ C$                                     |
| Max peak reverse current            | $I_{RM}$ 5 $\mu A$           | $V_{RRM}, T_J = 25^\circ C$   |
| Max peak reverse current            | $I_{RM}$ 1.0 mA              | $V_{RRM}, T_J = 150^\circ C$  |
| Max Recommended Operating Frequency | 10kHz                        |   |

\*Pulse test: Pulse width 300  $\mu sec$ . Duty cycle 2%

### Thermal and Mechanical Characteristics

|                            |                 |                                |
|----------------------------|-----------------|--------------------------------|
| Storage temperature range  | $T_{STG}$       | -65°C to 200°C                 |
| Operating case temp range  | $T_C$           | -65°C to 150°C                 |
| Maximum thermal resistance | $R_{\theta JC}$ | 2.0°C/W Junction to Case       |
| Mounting torque            |                 | 15 inch pounds maximum         |
| Weight                     |                 | .16 ounces (5.0 grams) typical |