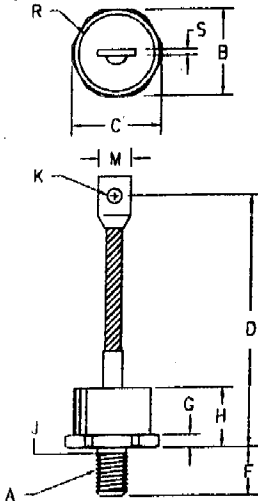


## Silicon Power Rectifier 1N4044-1N4056



| Dim. | Inches  |         | Millimeter |         | Notes |
|------|---------|---------|------------|---------|-------|
|      | Minimum | Maximum | Minimum    | Maximum |       |
| A    |         |         | 3/4-16 UNF |         | 1     |
| B    | 1.218   | 1.250   | 30.94      | 31.75   |       |
| C    | 1.350   | 1.375   | 34.29      | 34.93   |       |
| D    | 5.300   | 5.900   | 134.62     | 149.86  |       |
| F    | .793    | .828    | 20.14      | 21.03   |       |
| G    | .300    | .325    | 7.62       | 8.25    |       |
| H    | ---     | .900    | ---        | 22.86   |       |
| J    | .660    | .749    | 16.76      | 19.02   | 2     |
| K    | .338    | .348    | 8.59       | 8.84    | Dia   |
| M    | .665    | .755    | 16.89      | 19.18   |       |
| R    | ---     | 1.100   | ---        | 27.94   | Dia   |
| S    | .050    | .120    | 1.27       | 3.05    |       |

- Notes:
1. Full threads within 2-1/2 threads
  2. Standard polarity: Stud is Cathode  
Reverse polarity: Stud is Anode

### DO205AB (DO-9)

| Other JEDEC Types |        |        |        |        | Peak Reverse Voltage |
|-------------------|--------|--------|--------|--------|----------------------|
| 1N4044            | 1N1860 | 1N1870 | 1N2054 | 1N3260 | 50V                  |
| 1N4045            | 1N1861 | 1N1871 | 1N2055 | 1N3261 | 100V                 |
| 1N4046            | 1N1862 | 1N1872 | 1N2056 | 1N3262 | 150V                 |
| 1N4047            | 1N1863 | 1N1873 | 1N2057 | 1N3263 | 200V                 |
| 1N4048            |        |        | 1N2058 | 1N3264 | 250V                 |
| 1N4049            | 1N1864 | 1N1874 | 1N2059 | 1N3265 | 300V                 |
|                   |        |        | 1N2060 | 1N3266 | 350V                 |
| 1N4050            | 1N1865 | 1N1875 | 1N2061 | 1N3267 | 400V                 |
|                   |        |        | 1N2062 |        | 450V                 |
| 1N4051            | 1N1866 | 1N1876 | 1N2063 | 1N3268 | 500V                 |
| 1N4052            |        |        | 1N2064 | 1N3269 | 600V                 |
| 1N4053            |        |        | 1N2065 | 1N3270 | 700V                 |
| 1N4054            |        |        | 1N2066 | 1N3271 | 800V                 |
| 1N4055            |        |        | 1N2067 | 1N3272 | 900V                 |
| 1N4056            |        |        | 1N2068 | 1N3273 | 1000V                |
|                   |        |        |        | 1N3274 | 1200V                |
|                   |        |        |        | 1N3744 | 1400V                |

Add R suffix for reverse polarity

- Glass to metal seal construction
- High surge current capability
- Soft recovery
- Glass passivated die
- VRRM 50 to 1400 Volts

### Electrical Characteristics

|                                 |                                          |                                          |
|---------------------------------|------------------------------------------|------------------------------------------|
| Average forward current         | IF(AV) 275 Amps                          | TC = 120°C, square wave, RθJC = 0.18°C/W |
| Maximum surge current           | IFSM 5000 Amps                           | 8.3ms, half sine, TJ = 190°C             |
| Max I <sup>2</sup> t for fusing | I <sup>2</sup> t 104125 A <sup>2</sup> s | 8.3ms                                    |
| Max peak forward voltage        | VFM 1.3 Volts                            | IFM = 300A; TJ = 25°C*                   |
| Max peak reverse current        | IRM 10 mA                                | VRRM, TJ = 150°C                         |
| Max reverse current             | IRM 75 uA                                | VRRM, TJ = 25°C                          |

\*Pulse test: Pulse width 300 μsec. Duty cycle 2%

### Thermal and Mechanical Characteristics

|                                      |      |                                |
|--------------------------------------|------|--------------------------------|
| Storage temperature range            | TSTG | -65°C to 190°C                 |
| Operating junction temp range        | TJ   | -65°C to 190°C                 |
| Maximum thermal resistance           | RθJC | 0.18°C/W junction to case      |
| Typical Thermal Resistance (greased) | RθCS | .08°C/W case to sink           |
| Mounting torque                      |      | 300-325 inch pounds            |
| Weight                               |      | 8.5 ounces (240 grams) typical |

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