



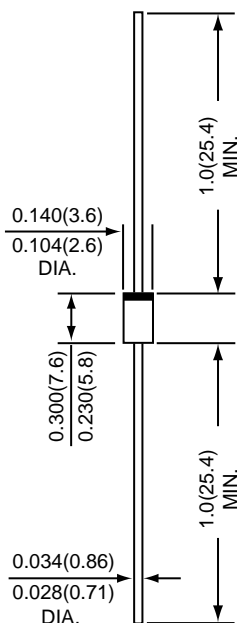
1N5391 THRU 1N5399

SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.5 Amperes

DO-204AC



*Dimensions in inches and (millimeters)



FEATURES

- * High reliability
- * Low reverse leakage
- * Low forward voltage drop
- * High current capability

MECHANICAL DATA

Case : JEDEC DO-204AC molded plastic
Epoxy : UL 94V-O rate flame retardant
Lead : MIL-STD-202F method 208C guaranteed
Mounting Position : Any
Weight : 0.38 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Ratings at 25 °C ambient temperature unless otherwise specified. | | | | | | | | | | | |
|--|---------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | SYMBOLS | 1N5391 | 1N5392 | 1N5393 | 1N5394 | 1N5395 | 1N5396 | 1N5397 | 1N5398 | 1N5399 | UNITS |
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | Volts |
| Maximum RMS voltage | VRMS | 35 | 70 | 140 | 210 | 280 | 350 | 420 | 560 | 700 | Volts |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | Volts |
| Maximum average forward rectified current at TL=70°C | I(AV) | 1.5 | | | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 50 | | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 1.5 A | VF | 1.4 | | | | | | | | | Volts |
| Maximum full load reverse current, full cycle average 0.375" (9.5mm) lead length at TL=75°C | IR(AV) | 30 | | | | | | | | | uA |
| Maximum DC reverse current at rated DC blocking voltage | IR | 5.0 50 | | | | | | | | | uA |
| Typical junction capacitance (NOTE) | CJ | 20 | | | | | | | | | pF |
| Typical thermal resistance | R θJA | 50 | | | | | | | | | °C / W |
| Operating junction and storage temperature range | TJ,TSTG | -65 to +175 | | | | | | | | | °C |

NOTES : Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

RATINGS AND CHARACTERISTIC CURVES 1N5391 THRU 1N5399

FIG.1 - FORWARD CURRENT DERATING CURVE

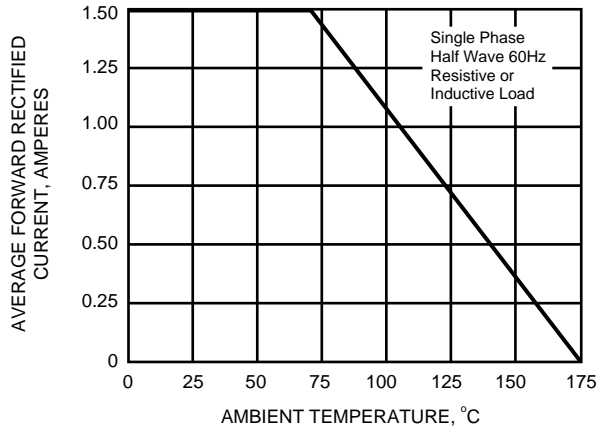


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

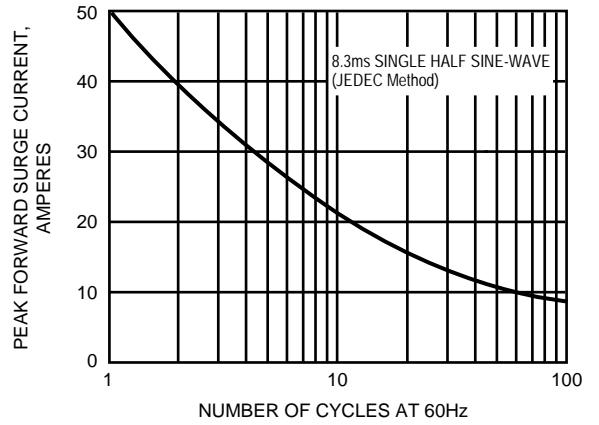


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

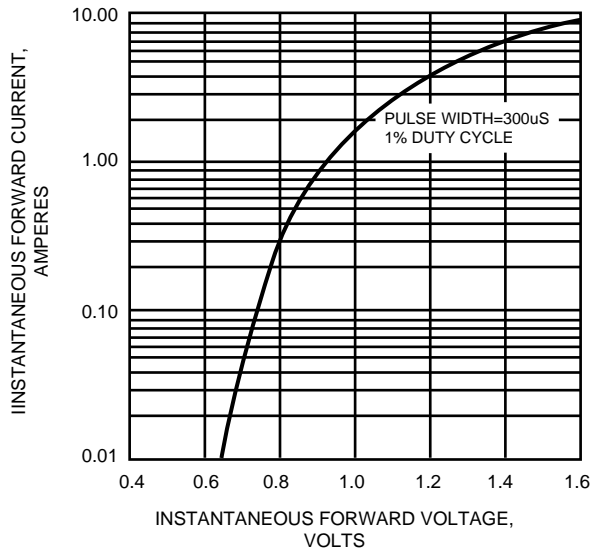


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

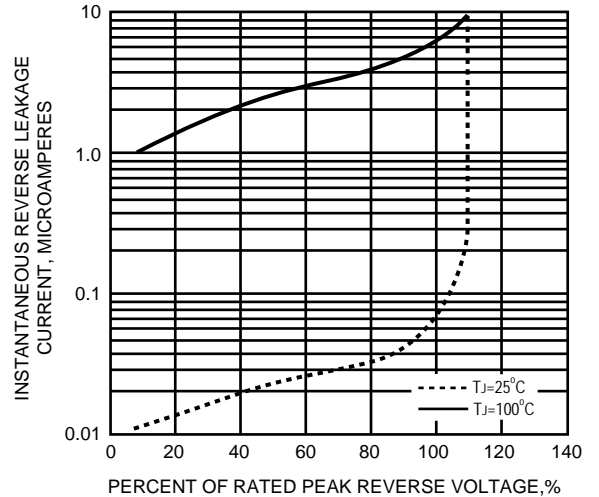


FIG.5 - TYPICAL JUNCTION CAPACITANCE

