Micro Commercial Components

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# 1N5391 THRU 1N5399

## 1.5 Amp Rectifier 50 - 1000 Volts

## Features

- Halogen free available upon request by adding suffix "-HF"
- Low Leakage Current
- High Current Capability
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance; 26°C/W Junction To Lead

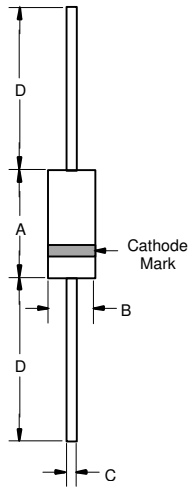
| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---|---|---|---|---|
| 1N5391 | 1N5391 | 50V | 35V | 50V |
| 1N5392 | 1N5392 | 100V | 70V | 100V |
| 1N5393 | 1N5393 | 200V | 140V | 200V |
| 1N5394 | 1N5394 | 300V | 210V | 300V |
| 1N5395 | 1N5395 | 400V | 280V | 400V |
| 1N5396 | 1N5396 | 500V | 350V | 500V |
| 1N5397 | 1N5397 | 600V | 420V | 600V |
| 1N5398 | 1N5398 | 800V | 560V | 800V |
| 1N5399 | 1N5399 | 1000V | 700V | 1000V |

## Electrical Characteristics @25°C Unless Otherwise Specified

| | | | |
|---|---|---|---|
| Average Forward Current | $I_{F(AV)}$ | 1.5A | $T_A$ = 70°C |
| Peak Forward Surge Current | $I_{FSM}$ | 50A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | $V_F$ | 1.1V | $I_{FM}$ = 1.5A; $T_J$ = 25°C |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$ | 5.0μA<br>50μA | $T_A$ = 25°C<br>$T_A$ = 100°C |
| Typical Junction Capacitance | $C_J$ | 20pF | Measured at 1.0MHz, $V_R$=4.0V |

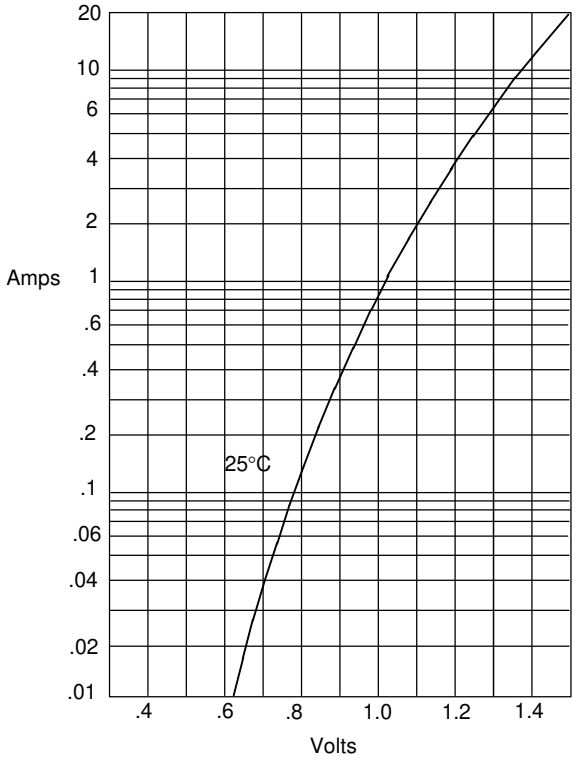
Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

## DO-15



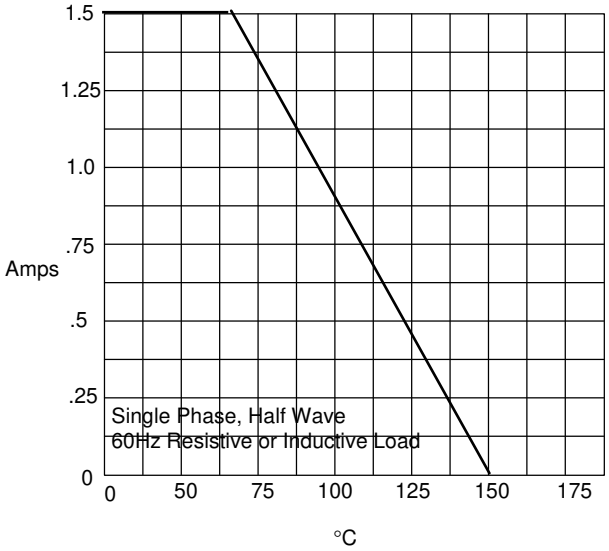

| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| | INCHES | | MM | | |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| A | .230 | .300 | 5.80 | 7.60 | |
| B | .104 | .140 | 2.60 | 3.60 | |
| C | .026 | .034 | .70 | .90 | |
| D | 1.000 | --- | 25.40 | --- | |

Figure 1
Typical Forward Characteristics



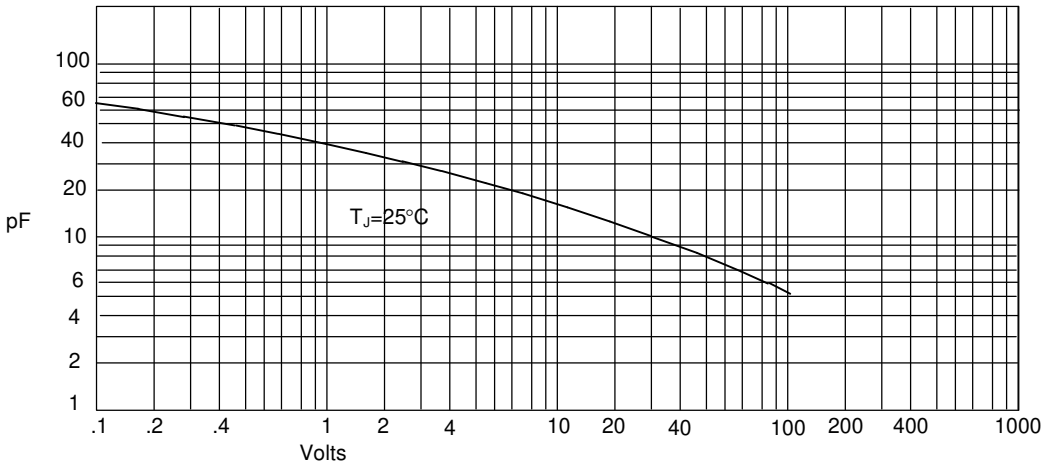

Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



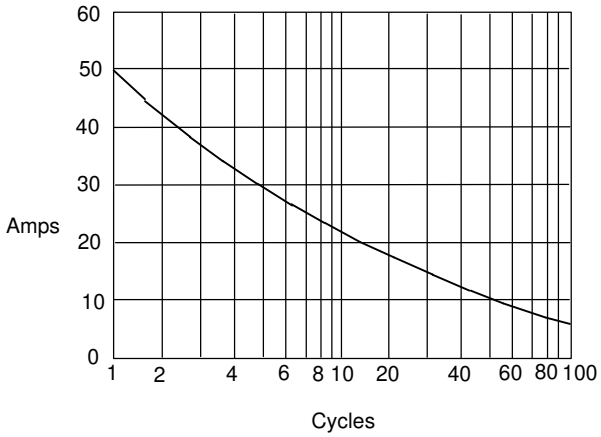

Average Forward Rectified Current - Amperes *versus*
Ambient Temperature -°C

Figure 3
Junction Capacitance




Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 4
Peak Forward Surge Current




Peak Forward Surge Current - Amperes*versus*
Number Of Cycles At 60Hz - Cycles

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## Ordering Information :

| Device | Packing |
|---|---|
| Part Number-TP | Tape&Reel: 4Kpcs/Reel |
| Part Number-AP | Ammo Packing: 3Kpcs/Ammo Box |
| Part Number-BP | Bulk: 25Kpcs/Carton |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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