

**M·C·C·**

Micro Commercial Components



Micro Commercial Components  
20736 Marilla Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

**BA157**  
**THRU**  
**BA159**

## Features

- Halogen free available upon request by adding suffix "-HF"
- Low Leakage Current
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Fast Switching For High Efficiency
- High emperature soldering guaranteed:260°C /10 seconds
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

## Maximum Ratings

- Operating Temperature: -65°C to +125°C
- Storage Temperature: -65°C to +125°C
- Maximum Thermal Resistance; 25°C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| BA157              | BA157          | 400V                                   | 280V                | 400V                        |
| BA158              | BA158          | 600V                                   | 420V                | 600V                        |
| BA159              | BA159          | 1000V                                  | 700V                | 1000V                       |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

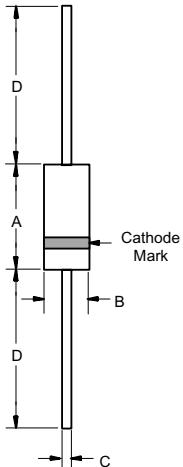
|   |             |                |  |
|---|-------------|----------------|--|
| Average Forward Current                                 | $I_{F(AV)}$ | 1.0A           | $T_A = 50^\circ C$                             |
| Peak Forward Surge Current                              | $I_{FSM}$   | 35A            | 8.3ms, half sine                               |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 1.3V           | $I_{FM} = 1.0A$ ;<br>$T_A = 25^\circ C$ *      |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 5.0 $\mu$ A    | $T_J = 25^\circ C$                             |
| Maximum Reverse Recovery Time<br>BA157~BA158<br>BA159   | $T_{rr}$    | 150nS<br>250nS | $I_F=0.5A$ ,<br>$I_R=1.0A$ ,<br>$I_{rr}=0.25A$ |
| Typical Junction Capacitance                            | $C_J$       | 15pF           | Measured at<br>1.0MHz,<br>$V_R=4.0V$           |

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

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

**1 Amp Fast Recovery Rectifier  
400~1000 Volts**

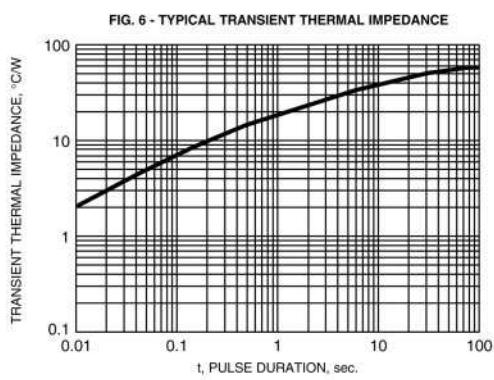
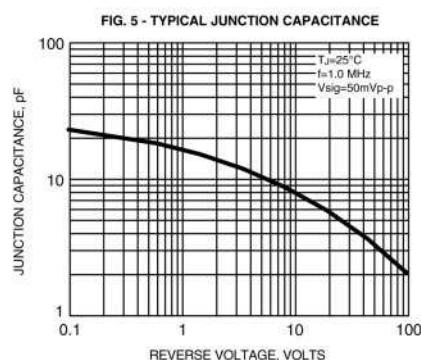
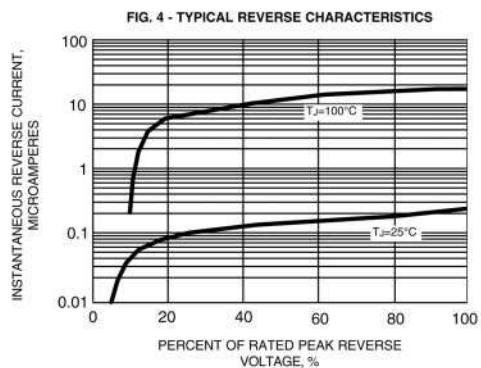
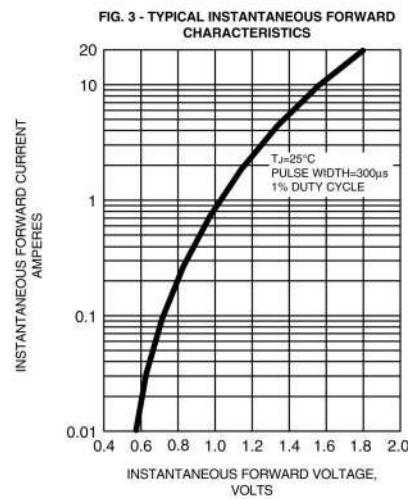
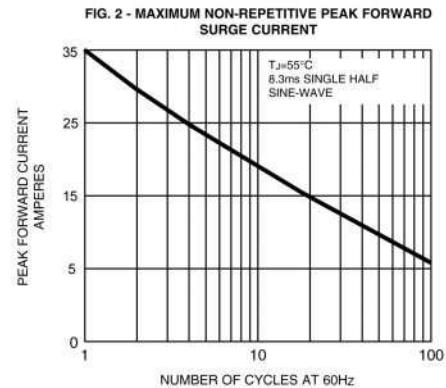
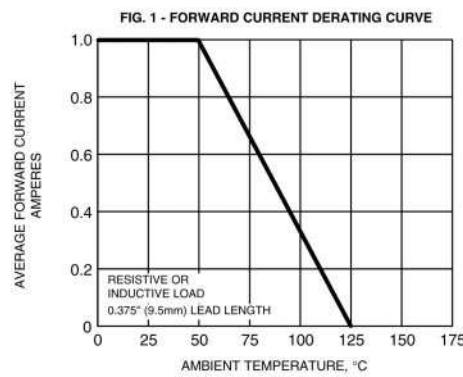
**DO-41**



| DIM | INCHES |      | MM    |      | NOTE |
|-----|--------|------|-------|------|------|
|     | MIN    | MAX  | MIN   | MAX  |      |
| A   | .166   | .205 | 4.10  | 5.20 |      |
| B   | .080   | .107 | 2.00  | 2.70 |      |
| C   | .028   | .034 | .70   | .90  |      |
| D   | 1.000  | ---  | 25.40 | ---  |      |

**www.mccsemi.com**

## BA157 THRU BA159



<sup>TM</sup>

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## Ordering Information :

| Device         | Packing                      |
|----------------|------------------------------|
| Part Number-TP | Tape&Reel: 5Kpcs/Reel        |
| Part Number-AP | Ammo Packing: 5Kpcs/Ammo Box |
| Part Number-BP | Bulk: 50Kpcs/Carton          |

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

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