

BA157 THRU BA159

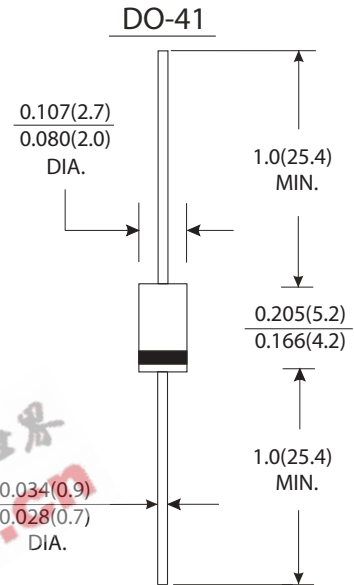
CURRENT 1.0 Ampere
VOLTAGE 400 to 1000 Volts

Features

- Plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Fast switching speed
- Diffused junction
- High current capability
- High temperature soldering guaranteed : 250 °C /10 seconds, 0.375"(9.5mm) lead length, 5 lbs.(2.3kg) tension.

Mechanical Data

- Case : JEDEC DO-41 molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.012 ounce, 0.34 gram



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

| | Symbols | BA157 | BA158 | BA159 | Units |
|-------------------------------------------------------------------------------------------------------------|------------------------------------|-------------|-------|-------|-------|
| Maximum recurrent peak reverse voltage | V _{RRM} | 400 | 600 | 1000 | Volts |
| Maximum RMS voltage | V _{RMS} | 280 | 420 | 700 | Volts |
| Maximum DC blocking voltage | V _{DC} | 400 | 600 | 1000 | Volts |
| Maximum average forward rectified current Rload at TA=50 °C | I(AV) | 1.0 | | | Amp |
| Peak forward surge current 10ms single half sine-wave superimposed on rated load at Rload at TA=25 °C | I _{FSM} | 35.0 | | | Amps |
| Maximum instantaneous forward voltage at 1.0A | V _F | 1.3 | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage TA=25 °C | I _R | 5.0 | | | µA |
| Maximum reverse recovery time (Note 1) | T _{rr} | 150 | | 250 | ns |
| Max. thermal resistance | R _{θJA} | 60 | | | °C/W |
| Typical junction capacitance (Note 2) | C _J | 6.0 | | | pF |
| Operating junction and storage temperature range | T _J T _{STG} | -65 to +150 | | | °C |

Notes:

- (1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES BA157 THRU BA159

FIG.1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

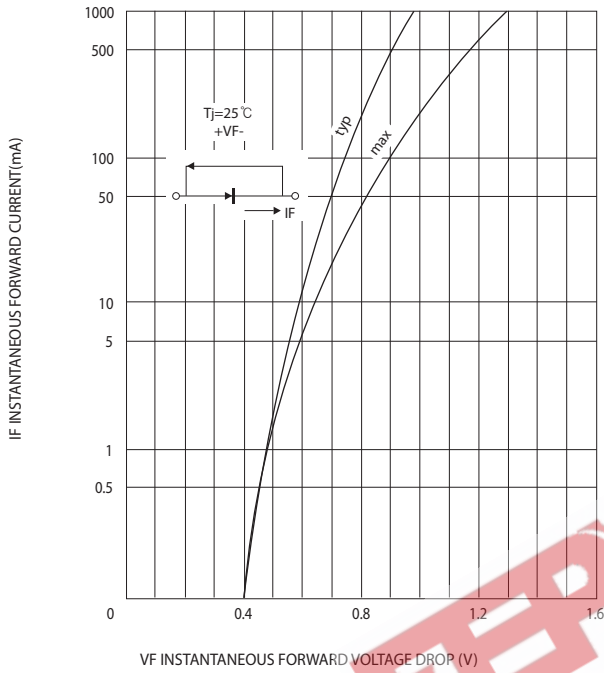


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

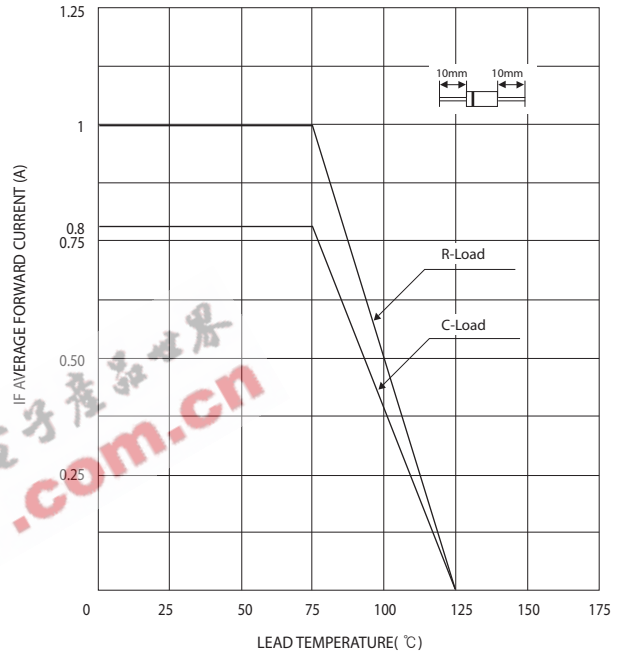


FIG.3-TYPICAL THERMAL IMPEDANCE

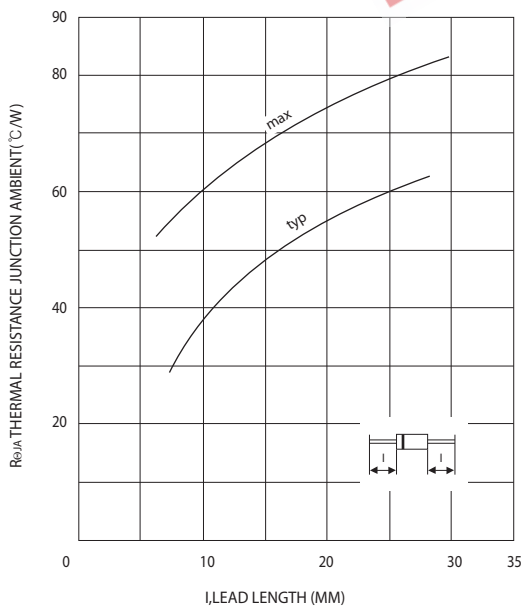


FIG.4-TYPICAL JUNCTION CAPACITANCE

