

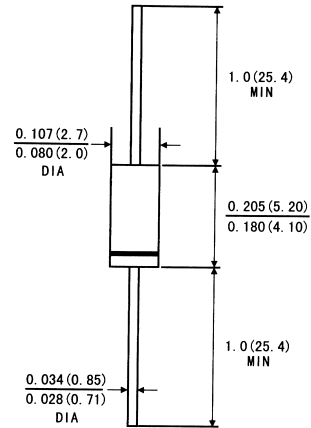
**FEATURES**

- . 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,5lbs.(2.3kg)tension

**MECHANICAL DATA**

- . **Case:** JEDEC DO-41 molded plastic body
- . **Terminals:** Plated axial leads, solderable per MIL-STD-750,method 2026
- . **Polarity:** Color band denotes cathode end
- . **Mounting Position:** Any
- . **Weight:** 0.012 ounce, 0.33 gram

**DO-41**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

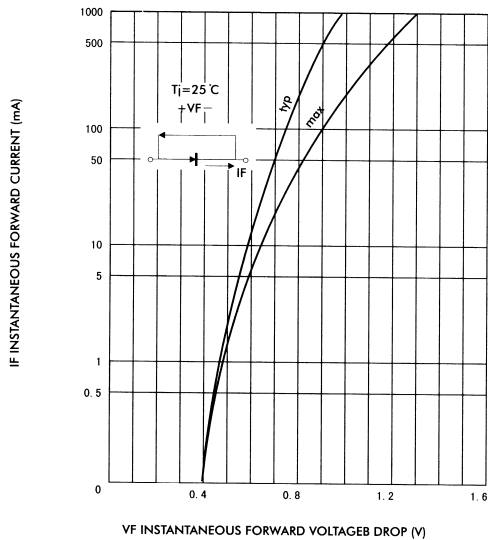
(Ratings at 25°C ambient temperature unless otherwise specified,Single phase,half wave 60Hz,resistive or inductive) load. For capacitive load,derate current by 20%)

	Symbols	BA157	BY158	BA159	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	400	600	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	280	420	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	400	600	100	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at T <sub>A</sub> =75°C	I <sub>(AV)</sub>	1.0			Amp
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)T <sub>A</sub> =75°C	I <sub>FSM</sub>	35.0			Amps
Maximum instantaneous forward voltage at 1.0 A	V <sub>F</sub>	1.3			Volts
Maximum DC Rreverse Current at rated DC blocking voltage T <sub>A</sub> =25°C	I <sub>R</sub>	5.0			μ A
Maximum reverse recovery time(Note 1)	T <sub>rr</sub>	150		250	ns
Maximum thermal resistance	R <sub>θ JA</sub>	60			°C/W
Typical junction Capacitance(Note 2)	C <sub>J</sub>	6.0			pF
Operating and storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-65 to +125			°C

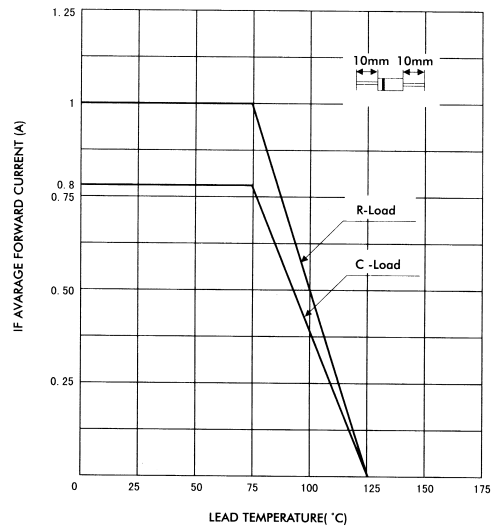
- Notes:** 1.Test conditions:I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>rr</sub>=0.25A.  
2.Measured at 1MHz and applied reverse voltage of 4.0V Volts

**RATINGS AND CHARACTERISTIC CURVES BA157 THRU BA159**

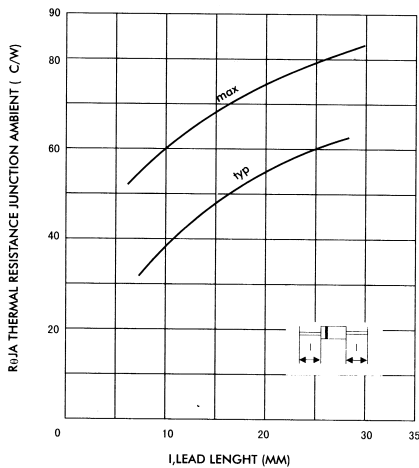
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.3-TYPICAL THERMAL IMPEDANCE**



**FIG.4-TYPICAL JUNCTION CAPACITANCE**

