

**CE**

CHENYI ELECTRONICS

**BA157 THRU BA159****FAST RECOVERY RECTIFIER**

Reverse Voltage - 400 to 1000 Volts

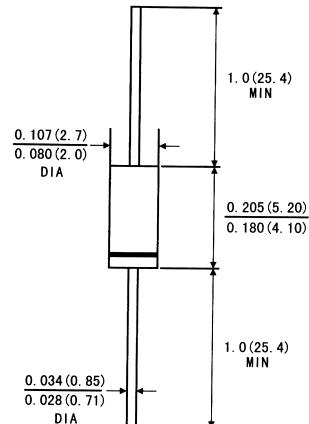
Forward Current - 1.0Ampere

**FEATURES**

- . Plastic package has Underwriters 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%)

	<b>Symbols</b>	<b>BA157</b>	<b>BY158</b>	<b>BA159</b>	<b>Units</b>
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
Maximum 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 Reverse 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

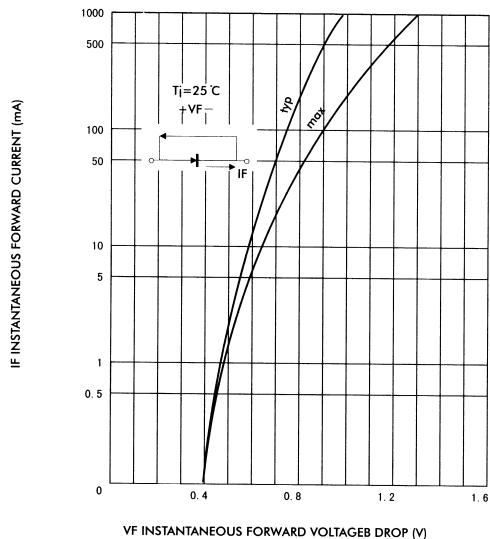
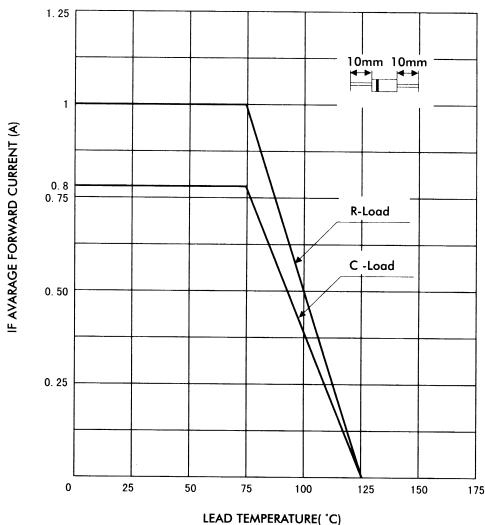
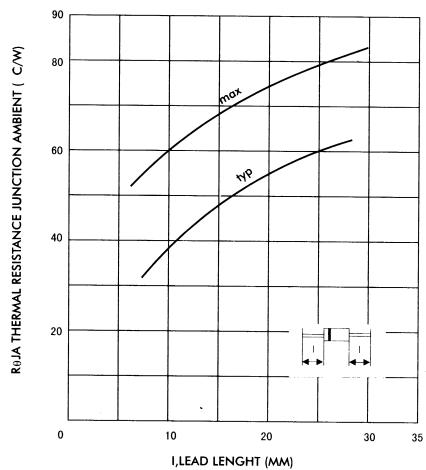
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**RATINGS AND CHARACTERISTIC CURVES BA157 THRU BA159****FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS****FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE****FIG.3-TYPICAL THERMAL IMPEDANCE****FIG.4-TYPICAL JUNCTION CAPACITANCE**