

## BA157 THRU BA159

#### FAST RECOVERY RECTIFIER

DO-41

0. 107 (2. 7) 0. 080 (2. 0)

DIA

0. 034 (0. 85) 0. 028 (0. 71) DIA

Dimensions in inches and (millimeters)

Reverse Voltage - 400 to 1000 Volts

Forward Current - 1.0Ampere

1.0(25.4) MIN

0. 205 (5. 20) 0. 180 (4. 10)

1.0(25.4) M/N

#### 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

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25<sup>°</sup>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	Vrrm	400	600	1000	Volts
Maximum RMS voltage	Vrms	280	420	700	Volts
Maximum DC blocking voltage	Vdc	400	600	100	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at TA=75°C	I(AV)	1.0			Amp
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)TA=75 <sup>°</sup> C	IFSM	35.0			Amps
Maximum instantaneous forward voltage at 1.0 A	VF	1.3			Volts
Maximum DC Rreverse Current at rated DC blocking voltage TA=25°C	lr	5.0			μΑ
Maximum reverse recovery time(Note 1)	Trr	1	50	250	ns
Maximum thermal resistance	$F \theta$ ja	60			°C/W
Typical junction Capacitance(Note 2)	С	6.0			pF
Operating and storage temperature range	Тј Тѕтс	-65 to +125		r	

Notes: 1.Test conditions:IF=0.5A,IR=1.0A,Irr=0.25A.

2.Measured at 1MHz and applied reverse voltage of 4.0V Volts



## **BA157 THRU BA159**

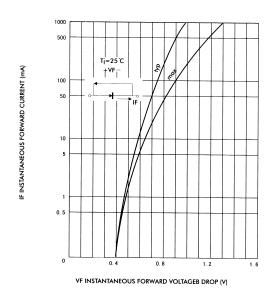
FAST RECOVERY RECTIFIER

Reverse Voltage - 400 to 1000 Volts

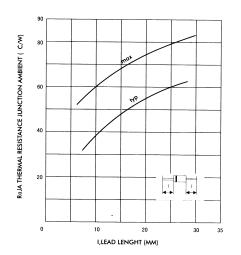
Forward Current - 1.0Ampere

### **RATINGS AND CHARACTERISTIC CURVES BA157 THRU BA159**

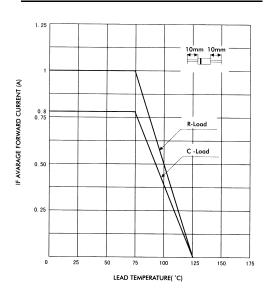
# FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



#### FIG.3-TYPICAL THERMAL IMPEDANCE



# FLG.2-TYPICAL FORWARD CURRENT DERATING CURVE



#### FIG.4-TYPICAL JUNCTION CAPACITANCE

