



PINGWEI ENTERPRISE

BA157 THRU BA159

1.0AMP . FAST RECOVERY RECTIFIERS

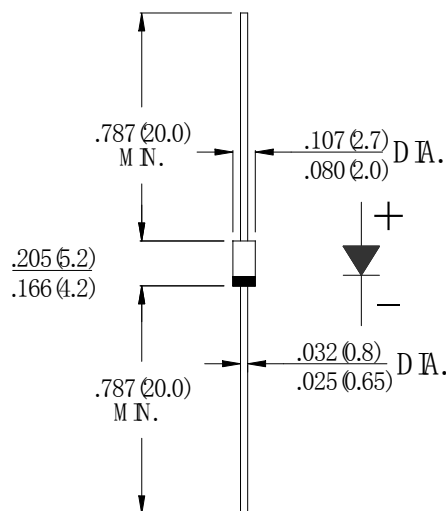
FEATURE

- . Fast switching
- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed
260°C /10sec/ 0.375" lead length at 5 lbs tension

MECHANICAL DATA

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any

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%

Type Number	SYMBOL	BA157	BA158	BA159	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	600	1000	V
Maximum RMS Voltage	V_{RMS}	280	420	700	V
Maximum DC blocking Voltage	V_{DC}	400	600	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0			A
Maximum Instantaneous forward Voltage at 1.0A DC	V_F	1.3			V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$	I_R	5.0 100.0			μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	150		250	ns
Typical Junction Capacitance (Note 2)	C_J	15			pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	75			$^\circ\text{C/W}$
Storage Temperature	T_{STG}	-55 to +150			$^\circ\text{C}$
Operation Junction Temperature	T_J	-55 to +150			$^\circ\text{C}$

Note:

1. Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C. Board Mounted.