



95 E. Jeffryn Boulevard
Deer Park, NY 11729
Tel (631) 595-1818
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BA157 thru BA159

Reverse Voltage 400 to 1000 Volts Fast Recovery Rectifiers
Forward Current 1.0 Ampere

Features

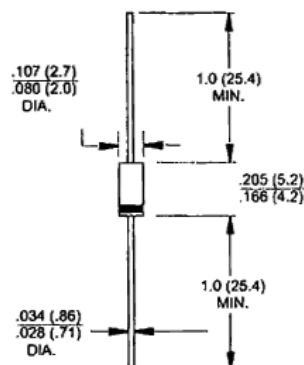
- ◆ Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- ◆ High surge current capability
- ◆ Void-free plastic package
- ◆ Fast switching for high efficiency
- ◆ High temperature soldering guaranteed: 350°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension
- ◆ T_J is 150°C (Max.) and T_{STG} is 175°C (Max.) with PI glue



DO-204AL (DO-41)

Mechanical Data

- ◆ Case: JEDEC DO-204AL (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



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	BA157	BA158	BA159D	BA159	Units
Maximum repetitive peak reverse voltage	V_{RRM}	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=55^{\circ}\text{C}$	I_{FAV}	1.0				Amp
Peak forward surge current 10ms single half sine-wave superimposed on rated load at $T_A=25^{\circ}\text{C}$	I_{FSM}	20.0				Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.3				Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}\text{C}$	I_R	5.0				μA
Maximum reverse recovery time at $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_F=0.25\text{A}$	t_r	150	250	500		nS
Typical junction capacitance at 4.0V, 1MHz	C_J	12				pF
Maximum operation junction temperature	T_J	-55 to +125				$^{\circ}\text{C}$
Maximum storage temperature	T_{STG}	-55 to +150				$^{\circ}\text{C}$

www.surgecomponents.com



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RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

