

Glass Passivated Rectifier Diodes

V_{RRM} - 400 Volts & 1000 Volts, 1A

multicomp PRO

**RoHS
Compliant**

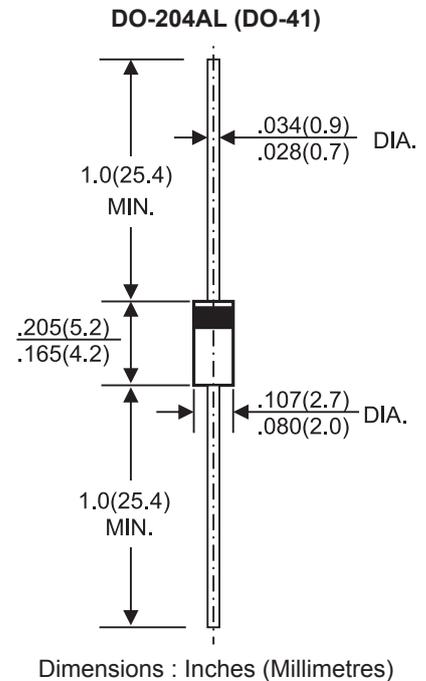


Features

- Low cost
- Fast switching for high efficiency
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Meet UL flammability classification 94V-0
- Lead free
- Case style: DO-204AL (DO-41) molded plastic

Maximum Ratings and Electrical Characteristics

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



Characteristics	Symbol	BA157G	BA159G	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	1000	V
Maximum RMS Voltage	V_{RMS}	280	700	
Maximum DC Blocking Voltage	V_{DC}	400	1000	
Maximum Average Forward Rectified Current @ $T_A = 75^\circ\text{C}$	$I_{(AV)}$	1		A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30		A
Peak Forward Voltage at 1A DC	V_F	1.3		V
Maximum DC Reverse Current @ $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_J = 100^\circ\text{C}$	I_R	5	100	μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	300		nS
Typical Junction Capacitance (Note 2)	C_J	25	15	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	25		$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150		$^\circ\text{C}$
Storage Temperature Range	T_{STG}			

Notes:

1. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$
2. Measured at 1MHz and applied reverse voltage of 4V DC
3. Thermal resistance junction to ambient

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Rating and Characteristic Curves

FIG. 1 - FORWARD CURRENT DERATING CURVE

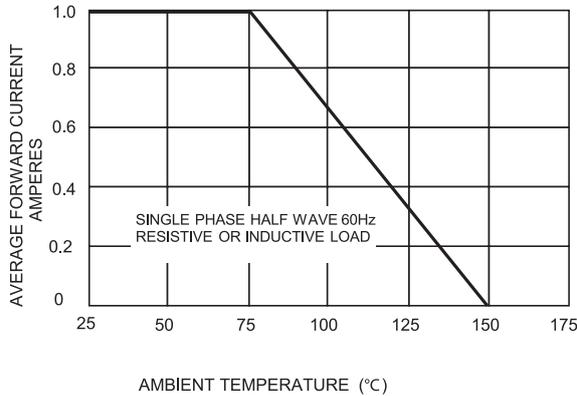


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

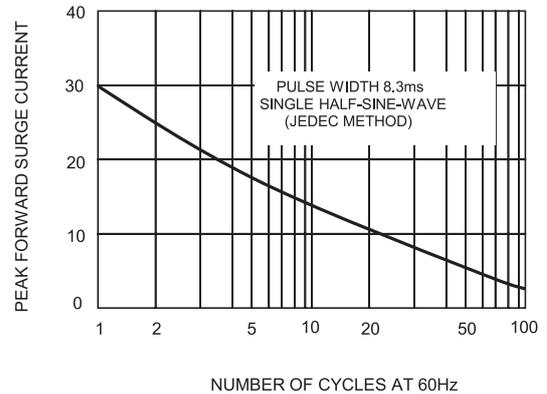


FIG.3 - TYPICAL JUNCTION CAPACITANCE

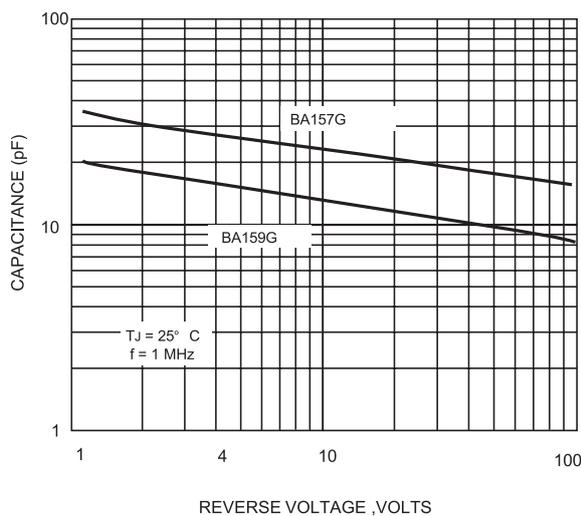
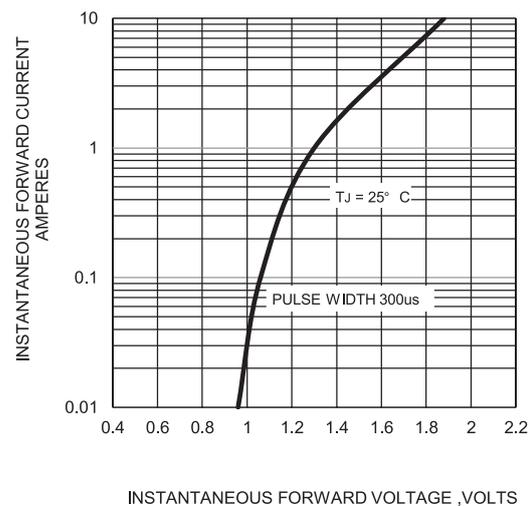


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Part Number Table

Description	Part Number
Rectifier Diode, 400V, 1A, DO-204AL (DO-41)	BA157G
Rectifier Diode, 1kV, 1A, DO-204AL (DO-41)	BA159G

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