

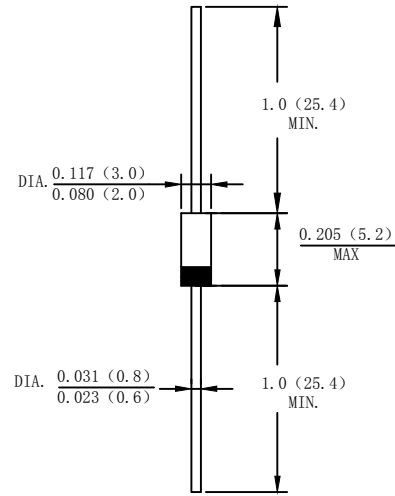
### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

### Mechanical Data

- Case: Moeded plastic DO-41
- Terminals: Plated leads solderable per MIL-STD-202,Method 208 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For Rohs/Lead Free Version

### DO-41



Dimensions in inches and (millimeters)

### 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%

Type Number	SYMBOL	BA157	BA158	BA159	Unit
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
Average Rectified Output Current (Note 1) @ $T_A = 55^\circ C$	$I_O$	1.0			A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30			A
Forward Voltage @ $I_F = 1.0A$	$V_{FM}$	1.2			V
Peak Reverse Current @ $T_A = 25^\circ C$	$I_R$	5.0			uA
At Rated DC Blocking Voltage @ $T_A = 125^\circ C$		100			
Maximum Reverse Recovery Time ( Note 2 )	$T_{RR}$	150		250	nS
Typical Junction Capacitance (Note 3)	$C_J$	12			pF
Operating Temperature Range	$T_J$	-55 to + 125			°C
Storage Temperature Range	$T_{STG}$	-55 to + 150			°C

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Reverse Recovery Test Conditions:  $I_F = 0.5A$ ,  $I_R = 1A$ ,  $I_{rr} = 0.25A$ .

3. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

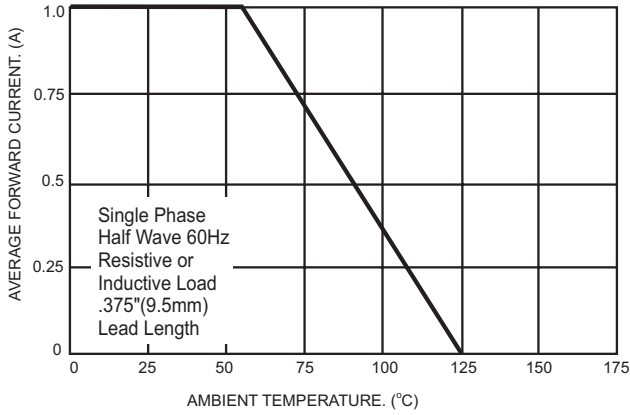


FIG.2- TYPICAL FORWARD CHARACTERISTICS

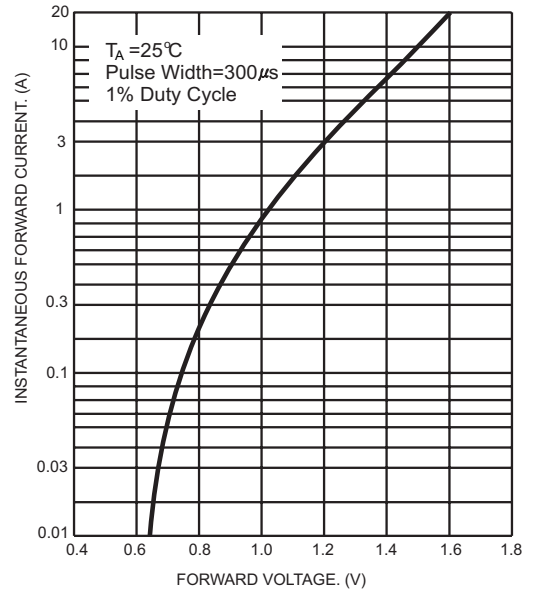


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

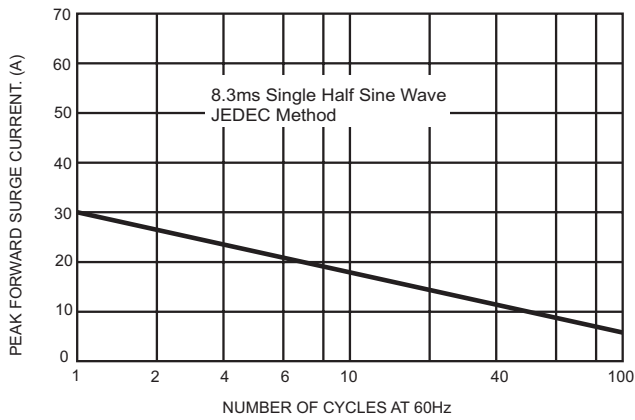


FIG.4- TYPICAL JUNCTION CAPACITANCE

