



AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

BY127 THRU BY133

**VOLTAGE RANGE
CURRENT**

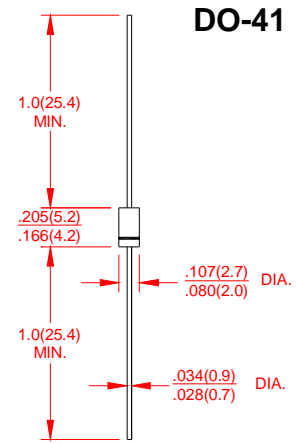
**1250 to 1300 Volts
1.0 Ampere**

FEATURES

- Low coat construction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 secods/.375”(9.5mm)lead length at 5 lbs(2.3kg) tension

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.012 ounce, 0.33 grams



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%

	SYMBOLS	BY127	BY133	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1250	1300	Volts
Maximum RMS Voltage	V_{RMS}	875	910	Volts
Maximum DC Blocking Voltage	V_{DC}	1250	1300	Volts
Maximum Average Forward Rectified Current 0.375”(9.5mm) lead length at $T_A=25^\circ\text{C}$	$I_{(AV)}$	1.0		Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	30		Amps
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.1		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I_R	$T_A = 25^\circ\text{C}$	5.0	μA
		$T_A = 100^\circ\text{C}$	50	
Maximum Full Load Reverse Current, full cycle average 0.375”(9.5mm)lead length at $T_L=75^\circ\text{C}$	$I_{R(AV)}$	30		μA
Typical Junction Capacitance (Note 1)	C_J	15		pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50		$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-55 to +150		$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150		$^\circ\text{C}$

Notes:

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to ambient at .375”(9.5mm) lead length, P.C.board mounted.



AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

BY127 THRU BY133

VOLTAGE RANGE
CURRENT

1250 to 1300 Volts
1.0 Ampere

RATING AND CHARACTERISTIC CURVES BY127 Thru BY133

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

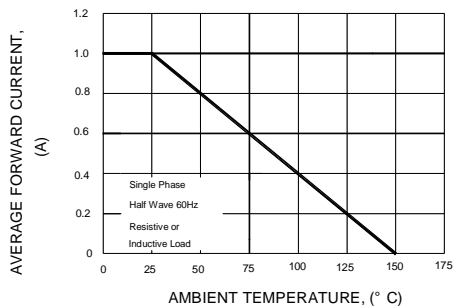


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

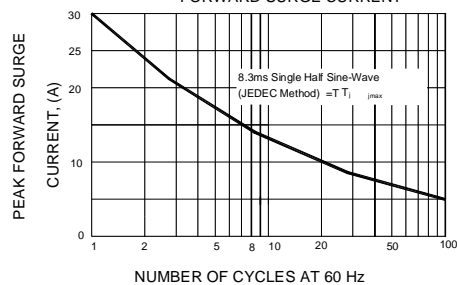


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

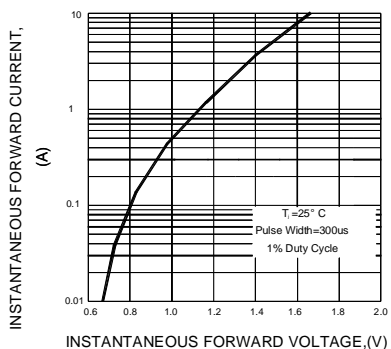


FIG.4-TYPICAL REVERSE CHARACTERISTICS

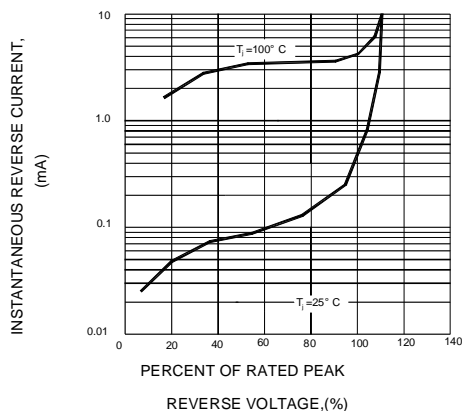


FIG.5-TYPICAL JUNCTION CAPACITANCE

