

VOLTAGE RANGE 1250 to 1300 Volts  
CURRENT 1.0 Ampere



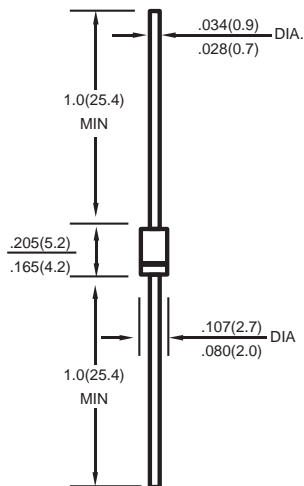
### Features

- ✧ High reverse voltage
- ✧ Low forward voltage drop
- ✧ Low reverse leakage
- ✧ High forward surge current capability
- ✧ High temperature soldering guaranteed:
- ✧ 260°C/10 seconds/0.375" (9.5mm) lead length at 5 lbs (2,3kg) tension

### Mechanical Data

- ✧ **Case:** Transfer molded plastic
- ✧ **Epoxy:** UL94V-0 rate flame retardant
- ✧ **Polarity:** Color band denotes cathode end
- ✧ **Mounting position:** Any
- ✧ **Weight:** 0.35 gram

### 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	SYMBOLS	BY127	BY133	UNITS
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 $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.0		Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30		Amps
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.1		Volts
Maximum DC Reverse Current at rated DC blocking voltage	$I_R$	$T_A=25^\circ\text{C}$	5.0	$\mu\text{Amps}$
		$T_A=100^\circ\text{C}$	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		$\mu\text{Amps}$
Typical Junction Capacitance(NOTE1)	$C_J$	15		pF
Typical Thermal Resistance(NOTE2)	$R_{\theta JA}$	50		$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +175		$^\circ\text{C}$

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, P.C. board mounted.

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

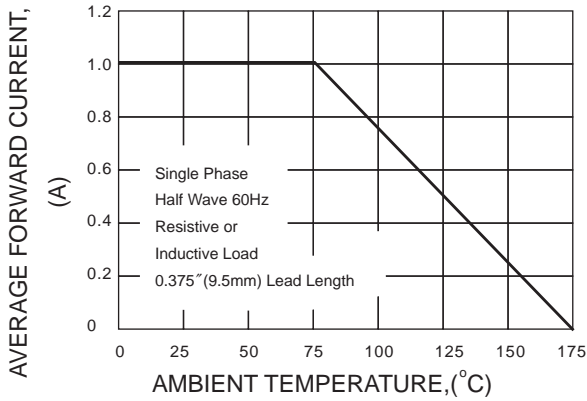


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

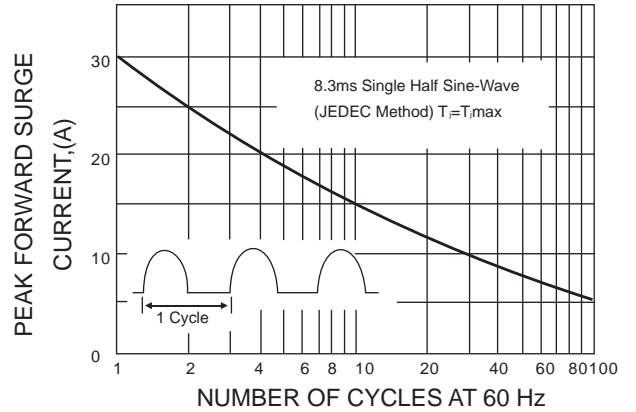


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

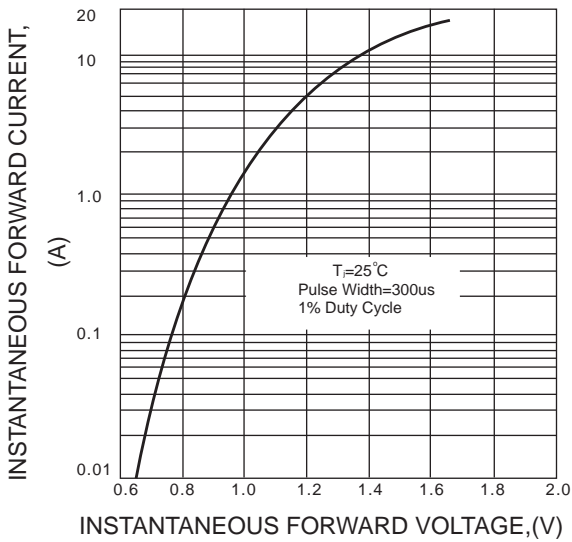


FIG.4-TYPICAL REVERSE CHARACTERISTICS

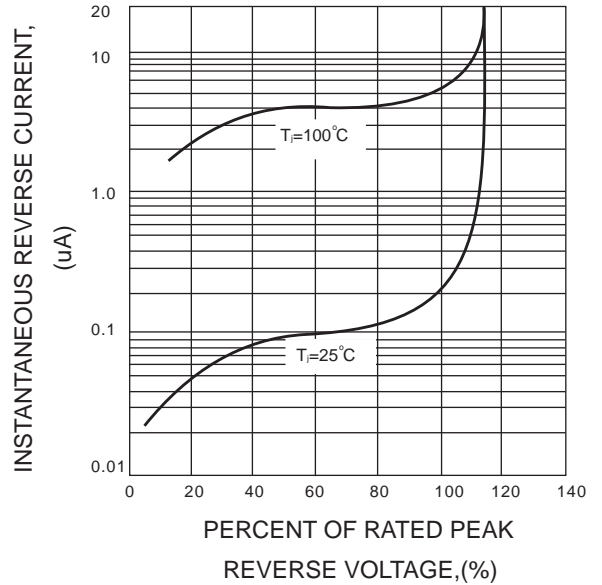


FIG.5-TYPICAL JUNCTION CAPACITANCE

