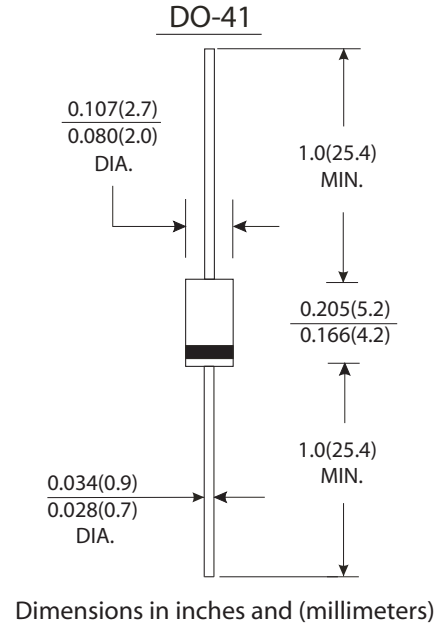


### Features

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- Low forward voltage drop
- High forward surge current capability
- High current capability
- High reliability

### Mechanical Data

- Case : JEDEC DO-41 molded plastic body
- Terminals : Lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.012 ounce, 0.33 grams



### 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 by 20%)

	Symbols	BY133	Units
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	1800	Volts
Maximum RMS voltage	V <sub>RMS</sub>	1270	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	1800	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length T <sub>A</sub> =75°C	I <sub>(AV)</sub>	1.0	Amps
Peak forward surge current 8.3ms half sine wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30.0	Amps
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	1.1	Volts
Maximum reverse current at rated DC blocking voltage	I <sub>R</sub>	T <sub>A</sub> =25°C	5.0
		T <sub>A</sub> =100°C	200.0
Typical thermal resistance (Note 2)	R <sub>θ JA</sub>	50.0	°C/W
	R <sub>θ JL</sub>	25.0	
Typical junction capacitance (Note 1)	C <sub>J</sub>	15.0	pF
Operating and storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-50 to +150	°C

#### Notes:

- (1) Measured at 1MHz and applied reverse voltage of 4.0V DC.
- (2) Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm) lead length, P.C.B. mounted



# RATINGS AND CHARACTERISTIC CURVES BY133

FIG.1-FORWARD CURRENT DERATING CURVE

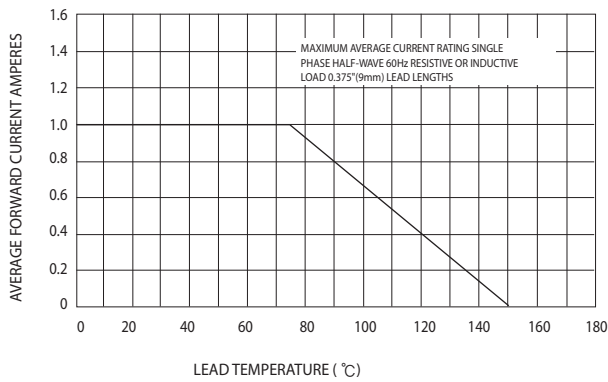


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

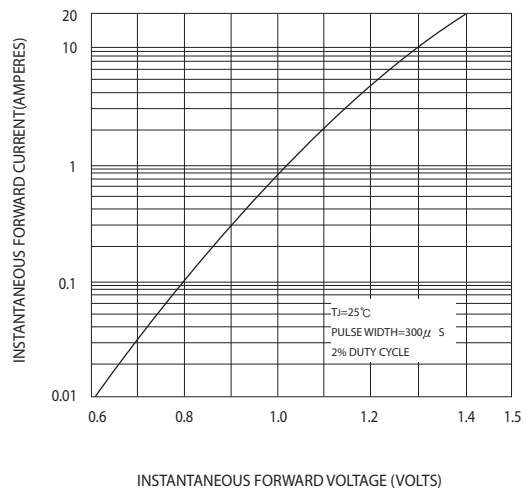


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

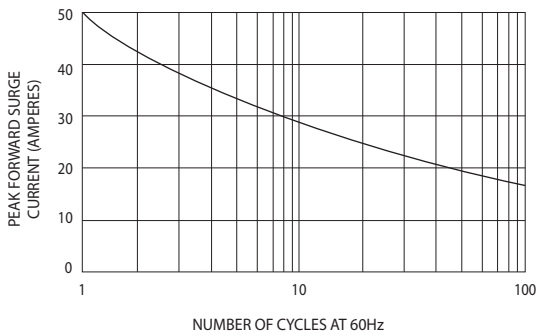


FIG.4-TYPICAL REVERSE CHARACTERISTICS

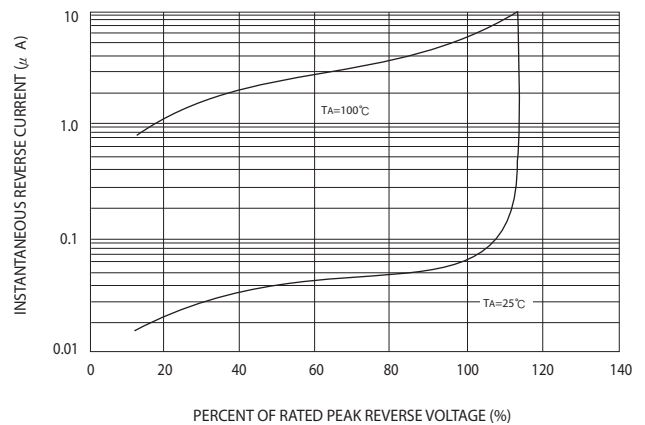


FIG.5-TYPICAL JUNCTION CAPACITANCE

