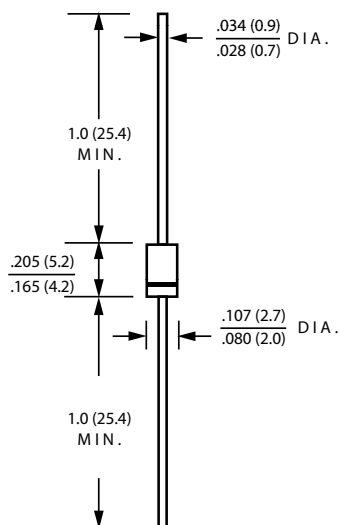


General Purpose Rectifiers Glass Passivation Junction



DO-41

Dimensions in inches and (millimeters)



Ordering Information

Part Number	Remark
BY133G	General
BY133G-H	Halogen Free
BY133G-Q	Automotive

PRIMARY CHARACTERISTICS

I_F	1A
V_{RRM}	1300V
I_{FSM}	30A
V_F	1.1V
$T_J \text{ max}$	150°C

Features

- High current capability
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC
- AEC-Q101 qualified

Mechanical Data

- Cases: DO-41
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead free Plating (Tin Finish)
Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.318 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	BY133G	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	1300	V
Maximum RMS voltage	V_{RMS}	910	V
Maximum DC blocking voltage	V_{DC}	1300	V
Maximum average forward rectified current	I_F	1.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0	A
Maximum Instantaneous Forward Voltage IF=1A @ 25°C	V_F	1.1	V
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	I_R	5 50	uA
Typical Junction Capacitance(NOTE1)	C_j	25	pF
Typical Thermal Resistance	$R_{\theta JL}$	20	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

NOTES:1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

General Purpose Rectifiers Glass Passivation Junction

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

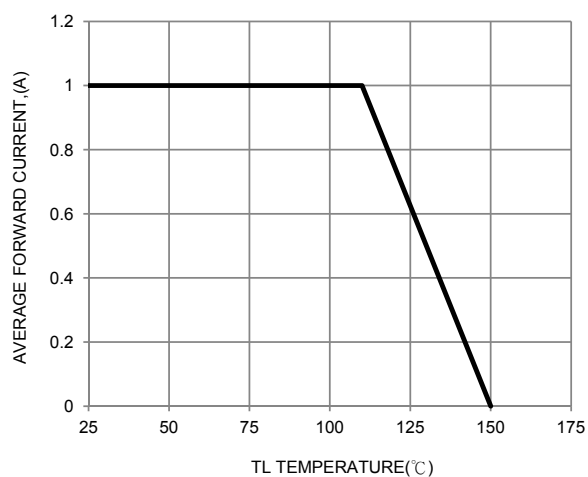


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

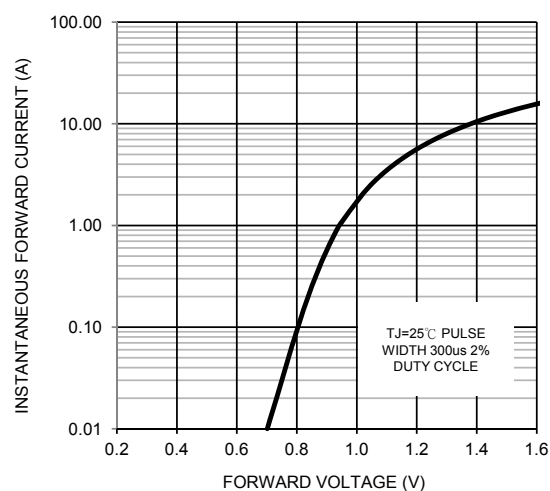


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

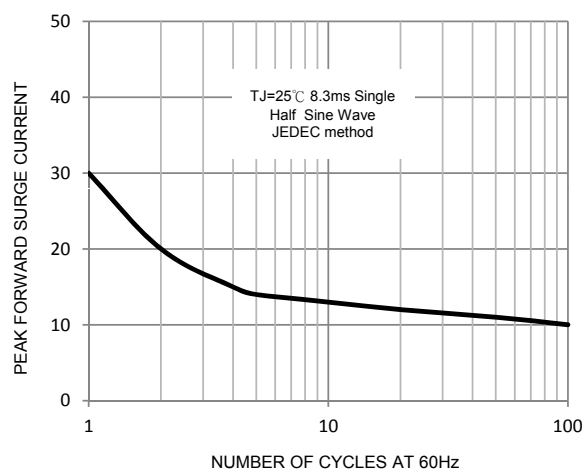


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

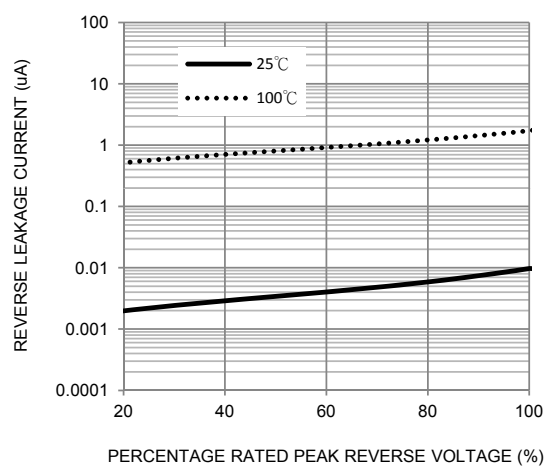


FIG. 5-TYPICAL JUNCTION CAPACITANCE

