BY133

SEMICONDUCTOR

1.0A SILICON RECTIFIER

Data Sheet 2555 Rev.—

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

DO-41 Dim Max Min Α 1.000(25.40) 0.205(5.21) 0.160(4.06) В С 0.028(0.71) 0.034(0.86) D 0.079(2.00) 0.107(2.72) All Dimensions in inch(mm)

Mechanical Data

Case: Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 0.35 grams (approx.)

Mounting Position: AnyMarking: Type Number

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	BY133	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	1300	V
RMS Reverse Voltage	VR(RMS)	910	V
Average Rectified Output Current (Note 1) @T _A = 75°C	lo	1.0	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30	А
Forward Voltage @I _F = 1.0A	VFM	1.0	V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	lгм	5.0 50	μΑ
Typical Junction Capacitance (Note 2)	Cj	15	pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{ heta}$ JA	50	K/W
Operating Temperature Range	Tj	-65 to +125	°C
Storage Temperature Range	Тѕтс	-65 to +150	°C

Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

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

2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.

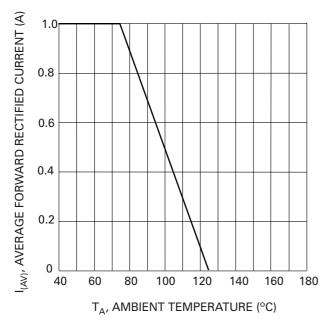
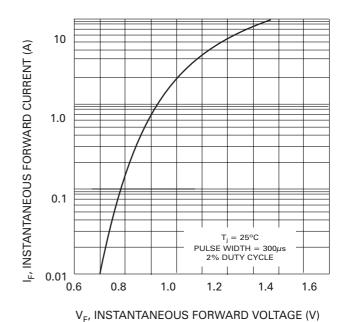


Fig. 1 Forward Current Derating Curve



V_F, INSTANTANLOOS FORWARD VOLIAGE (V)

Fig. 2 Typical Forward Characteristics

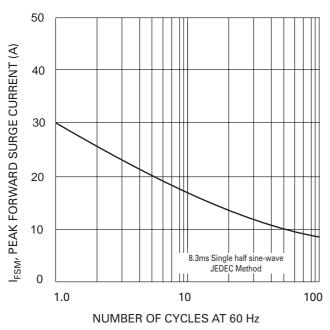


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

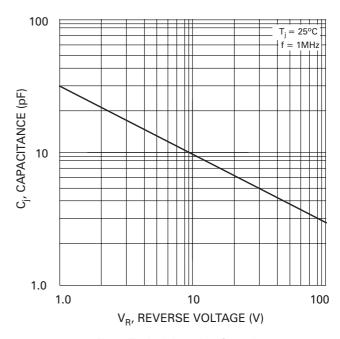


Fig. 4 Typical Junction Capacitance



TECHNICAL DATA

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