

Data Sheet 2572, Rev. -

BY251 THRU BY255

GENERAL PURPOSE SILICON RECTIFIER

Reverse Voltage - 200 to 1300 Volts Forward Current - 3.0 Ampere

0.220 (5.6) 1.0 (25.4) MIN. 0.375(9.5) 0.375(9.5) 0.285(7.2) 1.0 (25.4) MIN. 0.052 (1.3) 1.0 (25.4) MIN.

Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any Weight: 0.04 ounce, 1.10 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 current derate by 20%.

	SYMBOLS	BY251	BY252	BY253	BY254	BY255	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	800	1300	VOLTS
Maximum RMS voltage	V _{RMS}	140	280	420	560	910	VOLTS
Maximum DC blocking voltage	VDC	200	400	600	800	1300	VOLTS
Maximum average forward rectified current 0.375"(9.5mm) lead length at Ta=75℃	I(AV)	3.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	Іғѕм	150					Amps
Maximum instantaneous forward voltage at 3.0A	VF	1.1					Volts
Maximum DC reverse current Ta=25℃ at rated DC blocking voltage Ta=100℃	lR	10.0 500					μA
Typical junction capacitance (NOTE 1)	Сı	30.0					pF
Typical thermal resistance (NOTE 2)	R ₀ JA	20.0					°C/W
Operating junction and storage temperature range	T _J ,T _{STG}	-65 to +175					°C

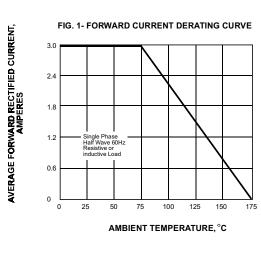
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

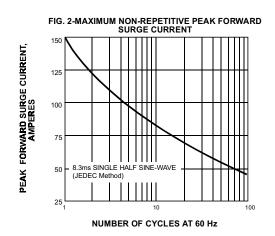
2.Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

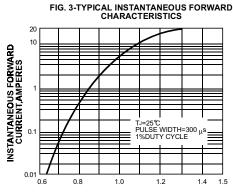
- 221 West Industry Court ☐ Deer Park, NY 11729-4681 ☐ (631) 586-7600 FAX (631) 242-9798
 - World Wide Web Site http://www.sensitron.com E-Mail Address sales@sensitron.com •

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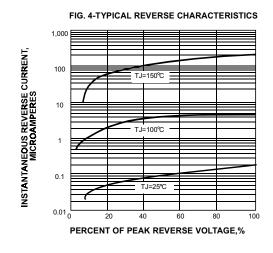
RATINGS AND CHARACTERISTIC CURVES BY251 THRU BY255

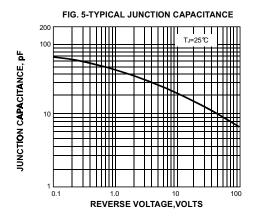


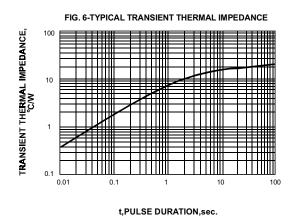




INSTANTANEOUS FORWARD VOLEAGE, VOLTS







^{• 221} West Industry Court 🗏 Deer Park, NY 11729-4681 🗏 (631) 586-7600 FAX (631) 242-9798 •

[•] World Wide Web Site - http://www.sensitron.com • E-Mail Address - sales@sensitron.com •



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