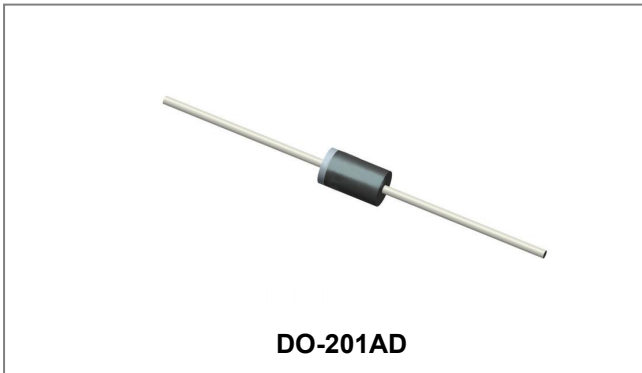


BY251 THRU BY255

GENERAL PURPOSE SILICON RECTIFIER

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



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/10s, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: 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

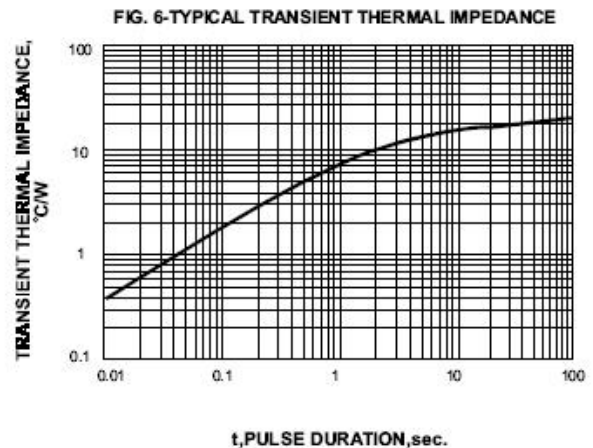
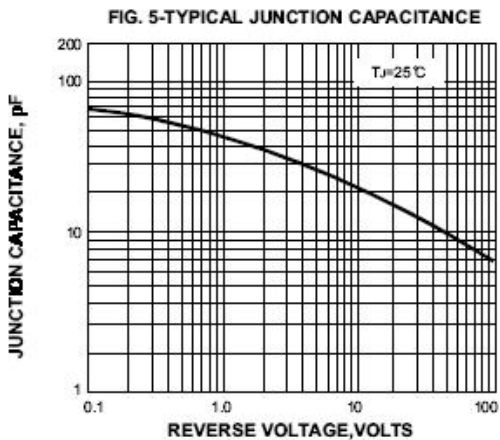
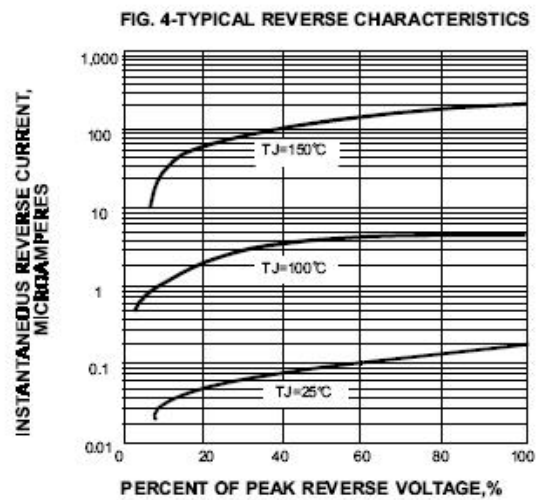
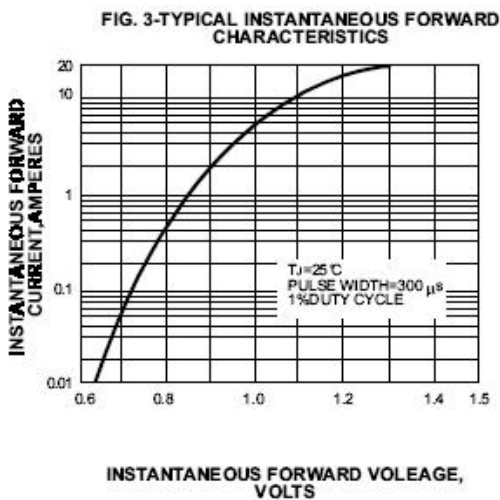
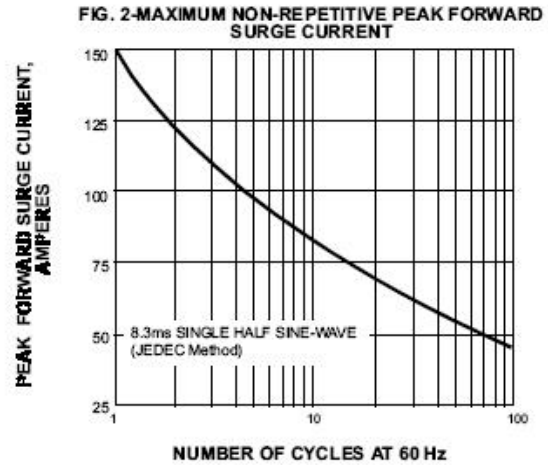
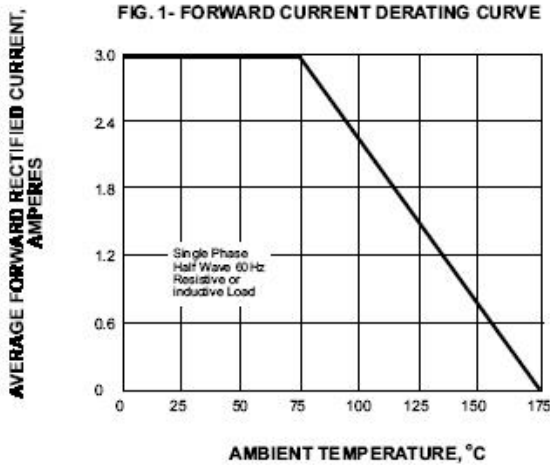
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

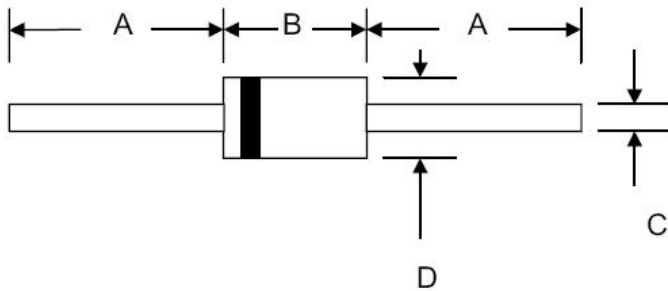
Characteristic	Symbol	BY251	BY252	BY253	BY254	BY255	Units
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	V _{RRM} V _{DC}	200	400	600	800	1300	V
Maximum RMS voltage	V _{RMS}	140	280	420	560	910	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at @T _A = 75°C	I _(AV)	3.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150					A
Maximum instantaneous forward voltage at 3.0A	V _F	1.1					V
Maximum DC reverse current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _R	10.0 500					µA
Typical Junction Capacitance (Note 1)	C _J	30.0					pF
Typical Thermal Resistance (Note 2)	R _{θJA}	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

Ratings and Characteristics Curves



Mechanical Dimensions DO-201AD



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	7.2	9.5	0.285	0.375
C	1.2	1.3	0.048	0.052
D	5.0	5.6	0.197	0.220

Ordering Information

Device	Package	Shipping
BY251-BY255	DO-201AD (Pb-Free)	1250pcs / tape

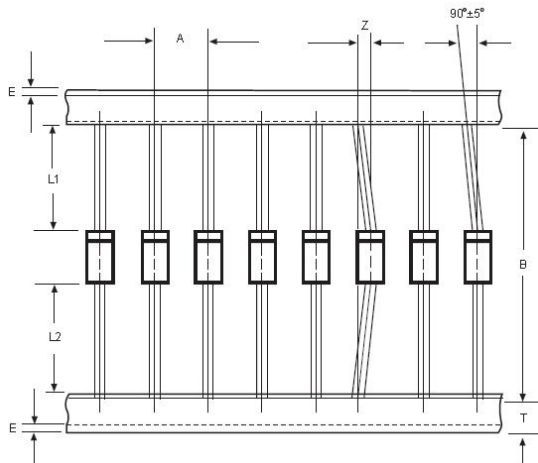
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



BY251 = Part Name

Carrier Tape Specification DO-201AD



SYMBOL	Millimeters	
	Min.	Max.
A	9.50	10.50
B	50.9	53.9
Z	-	1.20
T	5.60	6.40
E	-	0.80
IL1-L2I	-	1.0

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