



DATA SHEET

BY251 thru BY255

MEDIUM CURRENT PLASTIC RECTIFIER

VOLTAGE 200 to 1300 Volts **CURRENT** 3.0 Amperes

DO-201AD

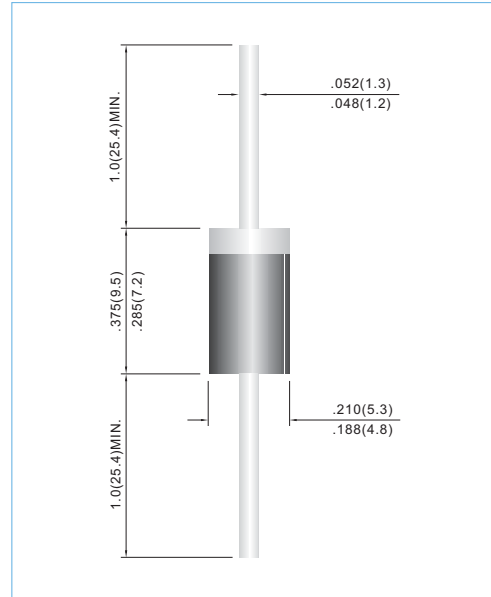
Unit: inch(mm)

FEATURES

- High current capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O
- Void-free Plastic in DO-201AD package.
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage .
- Hing current operation of 3Amperes at $T_A=95^{\circ}\text{C}$ with no thermal runaway.

MECHANICALDATA

Case: Molded plastic, DO-201AD
 Terminals: Axial leads, solderable to MIL-STD-202,Method 208
 Polarity: Color Band denotes cathode end
 Mounting Position: Any
 Weight: 0.04 ounce, 1.1 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60Hz.

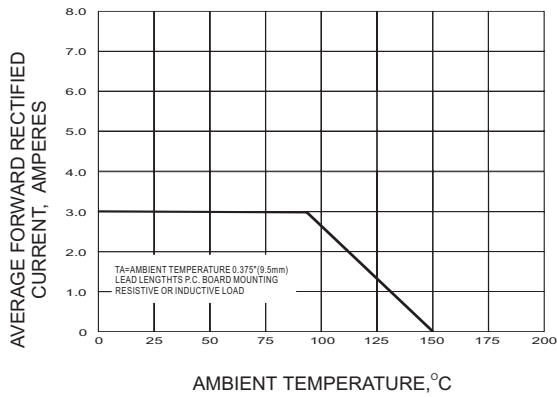
PARAMETER	SYMBOL	BY251	BY252	BY253	BY254	BY255	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	1300	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	910	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1300	V
Maximum Average Forward Current .375"(9.5mm) lead length at $T_A=95^{\circ}\text{C}$	I_{AV}	3.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	100					A
Maximum Forward Voltage $T_J=25^{\circ}\text{C}$ at 3.0A	V_F	1.1					V
Maximum DC Reverse Current at $T_A=25^{\circ}\text{C}$ Rated DC Blocking Voltage $T_A=100^{\circ}\text{C}$	I_R	5.0 1000					μA
Typical Junction capacitance (Note 1)	C_J	40					pF
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$	15					$^{\circ}\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150					$^{\circ}\text{C}$

NOTES:

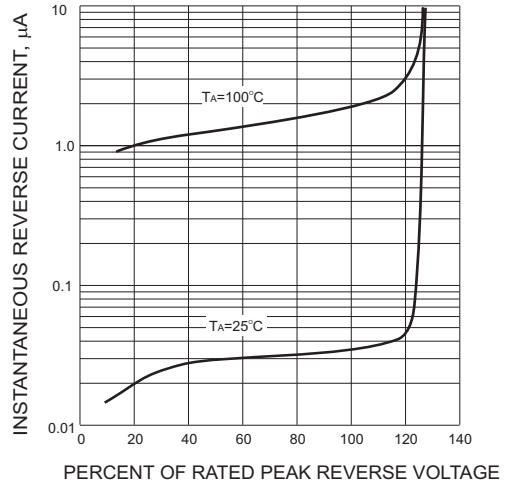
1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. Thermal resistance from junction to ambient.



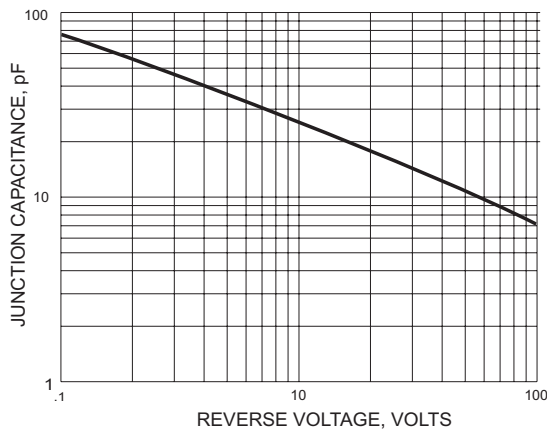
RATING AND CHARACTERISTIC CURVES



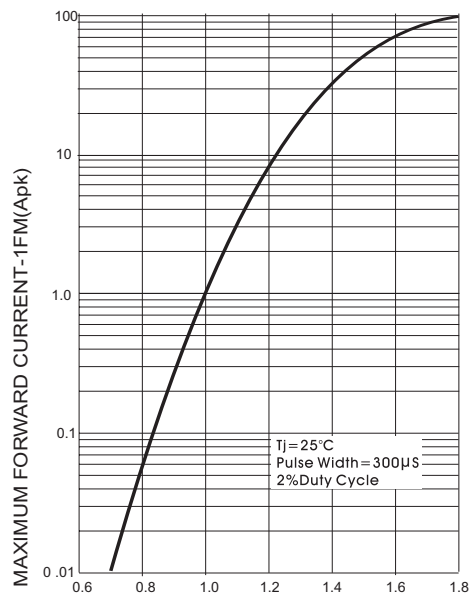
FORWARD DERATING CURVE



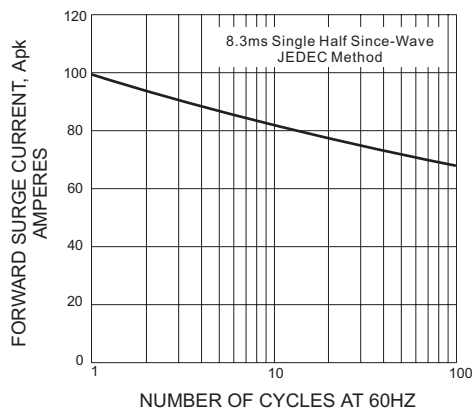
TYPICAL REVERSE CHARACTERISTICS



TYPICAL JUNCTION CAPACITANCE



TYPICAL FORWARD CHARACTERISTICS



MAXIMUM OVERLOAD SURGE CURRENT