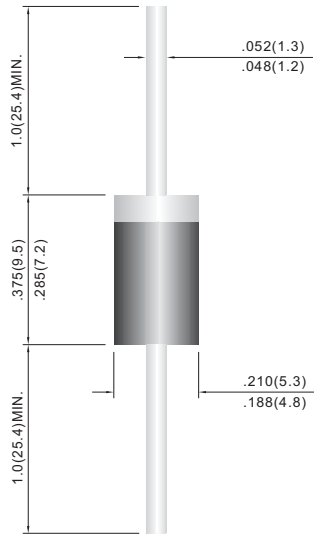
BY251 ~ BY255

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 .
- In compliance with EU RoHS 2002/95/EC directives

MECHANICALDATA

- Case: Molded plastic, DO-201AD
- Terminals: Axial leads, solderable to MIL-STD-750,Method 2026
- Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.0395 ounce, 1.122 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	$I_{F(AV)}$	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 at 3.0A	V_F	1.1					V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltage T_J=100°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					°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150					°C

NOTES:
1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2.Thermal resistance from junction to ambient.
3.Reverse Recovery Test Conditions:I_F=0.5A , I_R=1.0A ,Irr=0.25A

BY251 ~ BY255

RATING AND CHARACTERISTIC CURVES

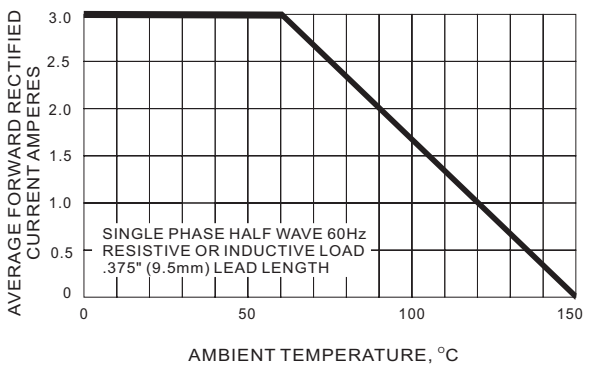


FIG.1 FORWARD CURRENT DERATING CURVE

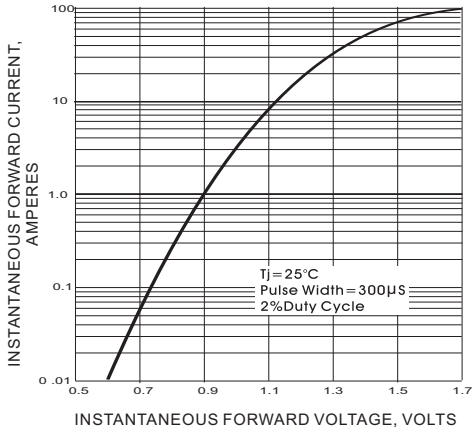


FIG.2 TYPICAL FORWARD CHARACTERISTICS

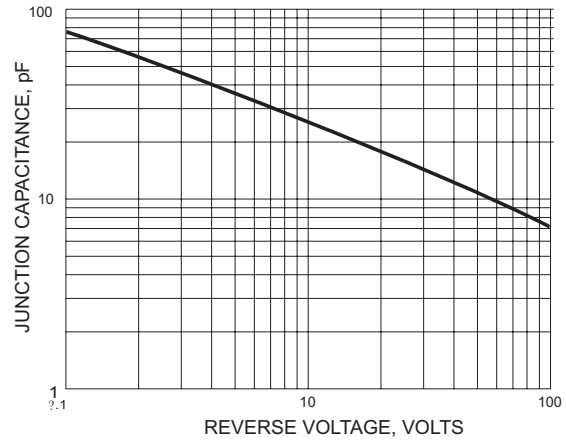


FIG.3 TYPICAL JUNCTION CAPACITANCE

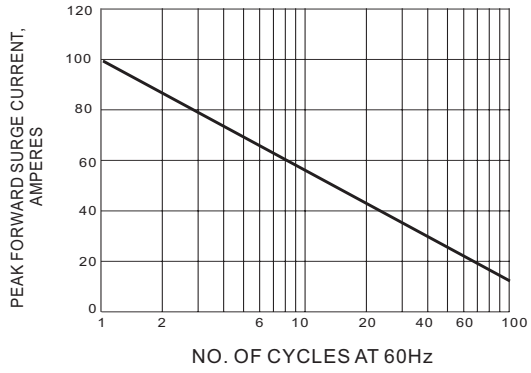


Fig.4 MAXIMUM NON REPETITIVE PEAK SURGE CURRENT

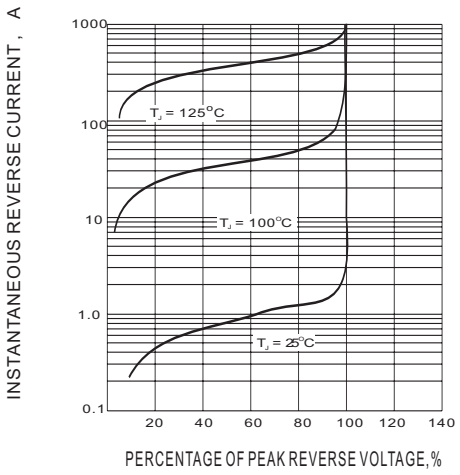


Fig.5-TYPICAL REVERSE CHARACTERISTIC