



S E M I C O N D U C T O R

BY251 THRU BY255

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 200 to 1300 Volts

Forward Current -3.0Amperes

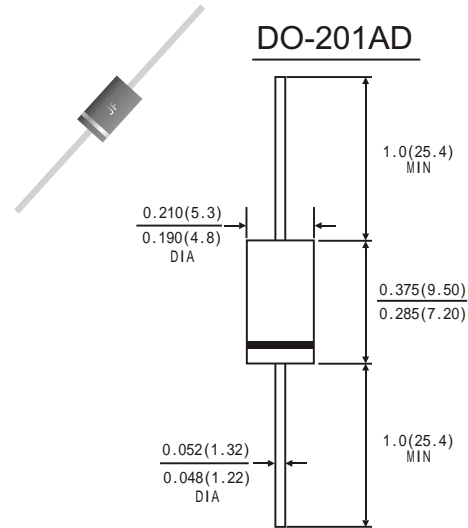
SILICON
RECTIFIER

FEATURES

- Low cost
- Diffused junction
- High current capability
- The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- *Case:* JEDEC DO-201AD molded plastic body
- *Terminals:* Plated axial lead solderable per MIL-STD-750,method 2026
- *Polarity:* Color band denotes cathode end
- *Mounting Position:* Any
- *Weight:* 0.042ounce, 1.1 grams



Dimensions in inches and (millimeters)

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, derate by 20%.)

	Symbols	BY 251	BY 252	BY 253	BY 254	BY 255	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current at T _A =50°C	I(AV)	3.0					Amps
Recurrent peak Forward Current	I _{FRM}	20.0					Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100.0					Amps
Maximum Instantaneous Forward Voltage at 3.0 A	V _F	1.1					Volts
Maximum Reverse current at rated DC Blocking Voltage	I _R	10.0					μA
Typical Thermal Resistance	R _{θJA}	30.0					°C/W
Typical Junction Capacitance (Note 1)	C _J	30.0					pF
Operating and Storage temperature Range	T _J T _{STG}	-50 to+150					°C

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

RATINGS AND CHARACTERISTIC CURVES BY251 THRU BY255

FIG.1-FORWARD CURRENT DERATING CURVE

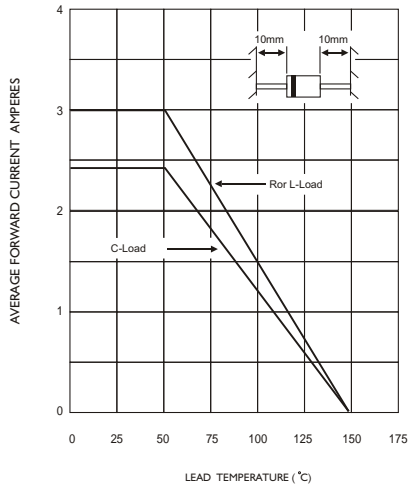


FIG.2-TYPICAL FORWARD CHARACTERISTICS

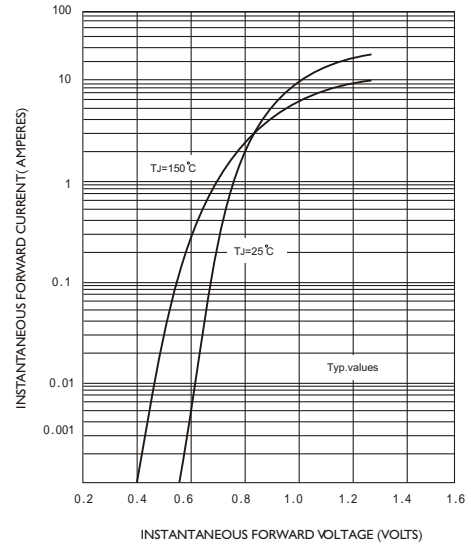


FIG.3-MAXIMUM NON-REPBTITIVE FORWARD SURGE CURRENT

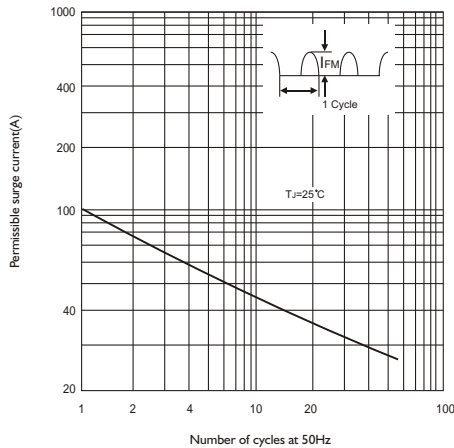


FIG.4-TYPICAL THERMAL RESISTANCE

