BY550-50 THRU BY550-1000

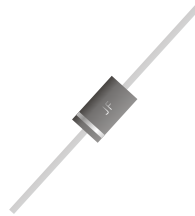
SEMICONDUCTOR

GENERAL PURPOSE PLASTIC RECTIFIER

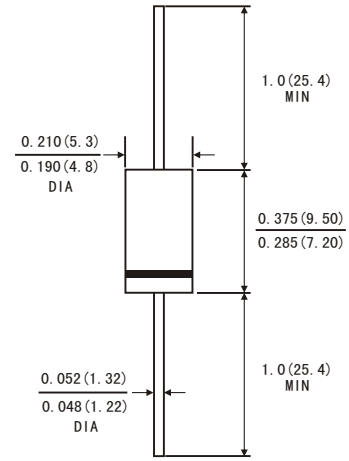
Reverse Voltage - 50 to 1000 Volts
Forward Current -5.0Amperes

FEATURES

- Low cost
- Diffused junction
- High current capability
- The plastic material carries U/L recognition 94V-0
- High temperature soldering guaranteed: 260 ℃/10 seconds at terminals
  Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC



DO-201AD



Dimensions in inches and (millimeters)

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25℃ ambient temperature unless otherwise specified ,Single phase ,half wave 60Hz,,resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	BY550 -50	BY550 -100	BY550 -200	BY550 -400	BY550 -600	BY550 -800	BY550 -1000	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm)lead length at Ta=60℃	$I_{(AV)}$	5.0							Amps
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300.0							Amps
Maximum Instantaneous Forward Voltage at 5.0 A	V_F	0.95							Volts
Maximum Reverse current at rated DC Blocking Voltage T_A =25℃	I_R	20.0							μA
Maximum Reverse current at rated DC Blocking Voltage T_A =100℃		50.0							
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	18.0							℃/W
Typical Junction Capacitance (Note 1)	C_J	50.0							pF
Operating and Storage temperature Range	T_J T_{STG}	-65 to+175							℃

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

2. Thermal resestance from Junctiion to Ambient at 0.375″(9.5mm) Lead Lengths, P. C. Board Mounted

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RATINGS AND CHARACTERISTIC CURVES BY550-50 THRU BY550-1000

FIG.1-FORWARD CURRENT DERATING CURVE

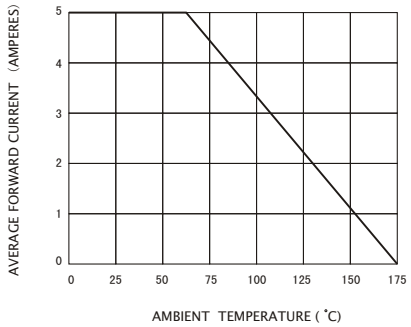


FIG.2-TYPICAL INSTANTANEOUS FORWARD VOLTAGE.(V)

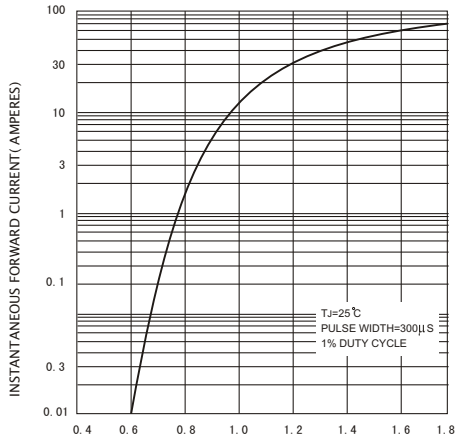


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

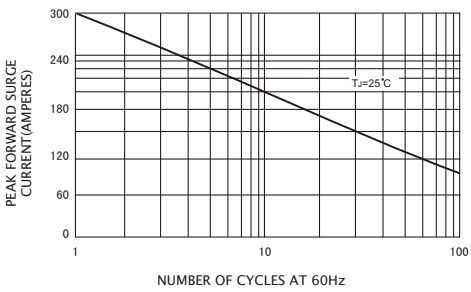


FIG.4-TYPICAL REVERSE CHARACTERISTICS

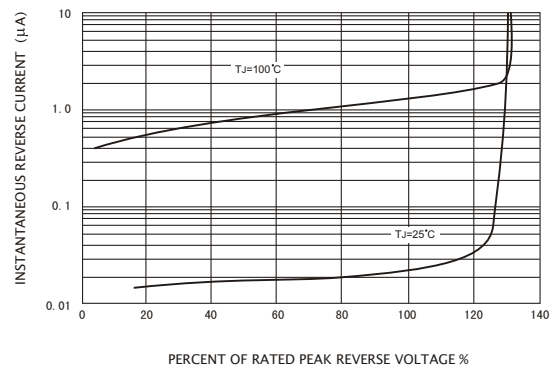
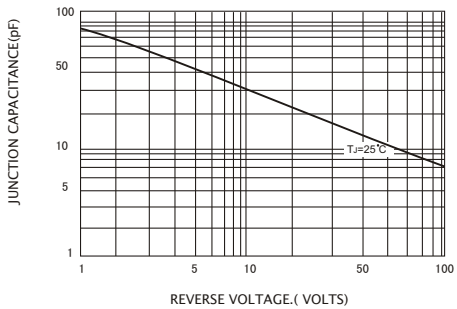


FIG.5-TYPICAL JUNCTION CAPACITANCE



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