

### Features

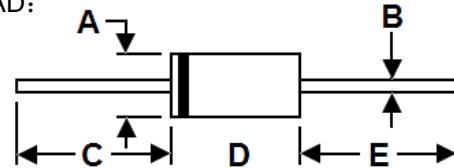
- \* Low Forward Voltage Drop
- \* High Current Capability
- \* High Reliability
- \* High Surge Current Capability



RoHS  
COMPLIANT

### Package Outline Dimensions

DO-201AD:



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.8	5.3	0.189	0.209
B	1.2	1.3	0.047	0.051
C	25.4	-	1.0	-
D	7.2	9.6	0.283	0.378
E	25.4	-	1.0	-

### Mechanical Data

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting Position: Any

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	BY550-50	BY550-100	BY550-200	BY550-400	BY550-600	BY550-800	BY550-1000	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	50	100	200	400	600	800	1000	V
Maximum D.C Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" (9.5mm)Lead Length @ $T_A=60^\circ\text{C}$	$I_{F(AV)}$	5.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	300							A
Maximum Instantaneous Forward Voltage at 5.0A	$V_F$	0.95							V
Maximum D.C Reverse Current @ $T_A=25^\circ\text{C}$ at Rated D.C Blocking Voltage @ $T_A=100^\circ\text{C}$	$I_R$	20 50							$\mu\text{A}$
Typical junction capacitance(Note1)	$C_J$	50							pF
Typical Thermal Resistance(Note2)	$R_{\theta JA}$	18							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J/T_{STG}$	-55 to +125 / -55 to +150							$^\circ\text{C}$

Note: 1、Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C. 2、Thermal Resistance From Junction to Ambient 0.375"(9.5mm) Lead Length.

### Ratings and Characteristic Curves

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

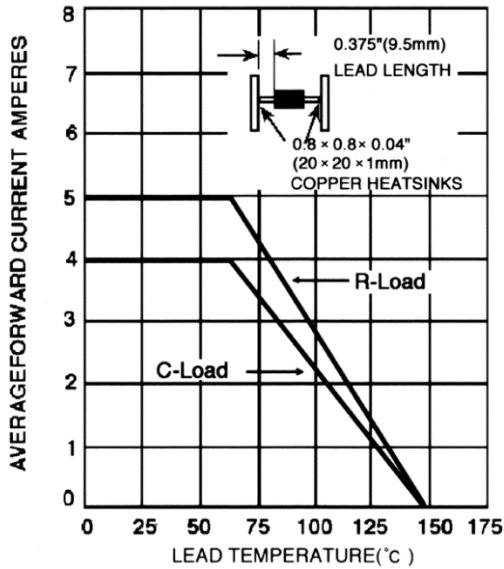


FIG. 2 – TYPICAL FORWARD CHARACTERISTICS

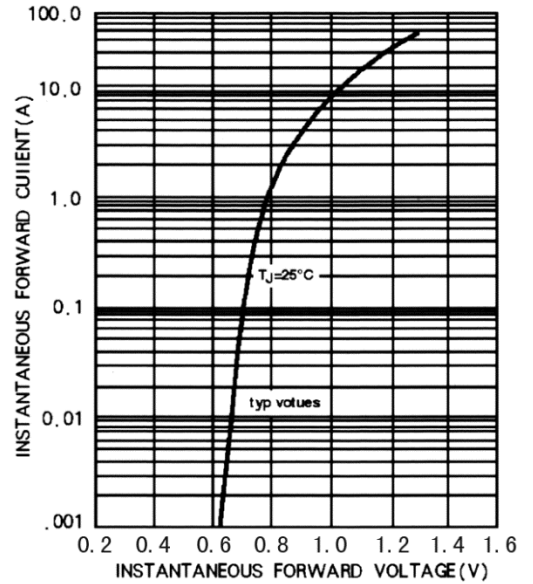


FIG. 3 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

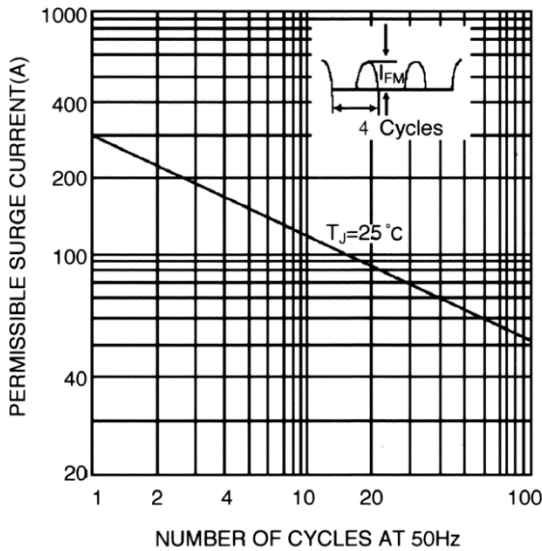
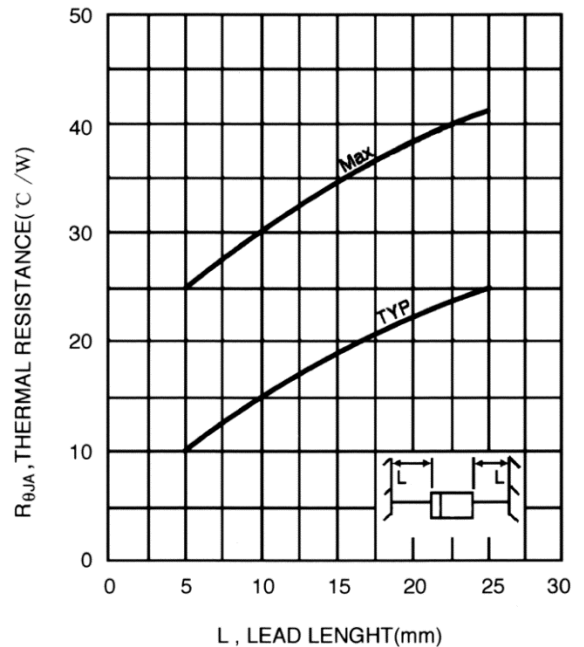


FIG. 4 – TYPICAL THERMAL RESISTANCE





**BY550-50 THRU BY550-1000**  
*5.0 Amps. Silicon Rectifiers*

**Ordering Information**

<b>Part No.</b>	<b>Package</b>	<b>Packing</b>
BY550-50~BY550-1000	DO-201AD	0.8K/AMMO box
BY550-50~BY550-1000	DO-201AD	1.0K/AMMO box
BY550-50~BY550-1000	DO-201AD	1.2K/AMMO box
BY550-50~BY550-1000	DO-201AD	1.2K/13" Paper reel
BY550-50~BY550-1000	DO-201AD	0.5K/Bulk packing