



BY550 - 50 THRU BY550 - 1000

5.0 AMPS. SILICON RECTIFIERS

FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

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
- * Weight: 1.18 grams

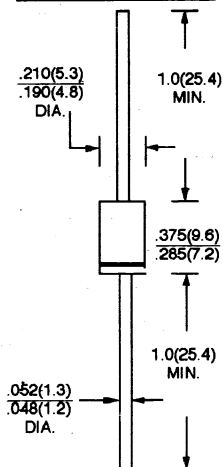
VOLTAGE RANGE

50 to 1000 Volts

CURRENT

5.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

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	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	V
Maximum Reverse 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 @ $T_L = 60^\circ\text{C}$	$I_{F(AV)}$	5.0							A
Repetitive Peak Forward Current($f > 15\text{Hz}$)(Note 1.)	I_{FRM}	60.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	300							A
Maximum Instantaneous Forward Voltage at 5.0A	V_F	1.1							V
Maximum D.C Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated D.C Blocking Voltage	I_R	20.0							μA
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$	30.0							$^\circ\text{C/W}$
Operating Temperature Range	T_J	- 65 to + 150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 150							$^\circ\text{C}$

NOTES: 1. Valid. If leads are kept at ambient temperature at distance of 10mm from case.

2. Thermal Resistance from Junction to Ambient 0.375"(9.5mm) Lead Length.

RATINGS AND CHARACTERISTIC CURVES (BY550 - 50 THRU BY550 - 100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

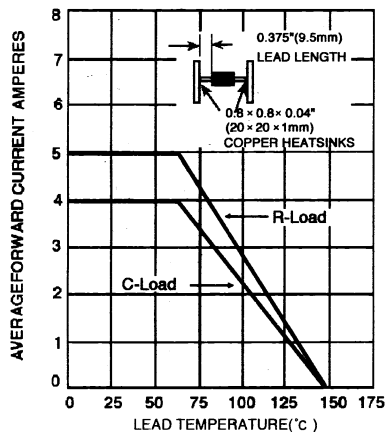


FIG. 2 - TYPICAL FORWARD CHARACTERISTICS

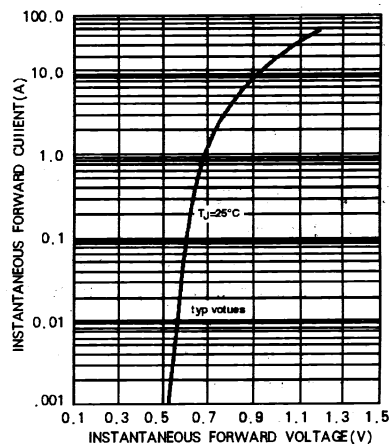


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

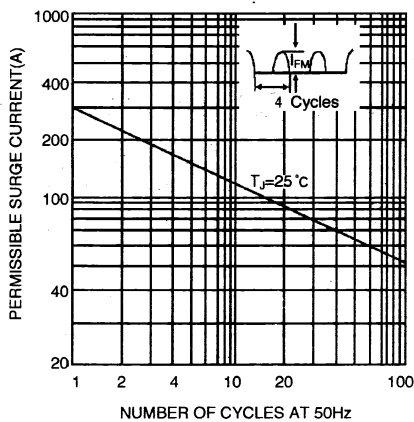


FIG. 4 - TYPICAL THERMAL RESISTANCE

