



BY500-50 thru BY500-1000

PLASTIC SILICON RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts
 FORWARD CURRENT - **5.0** Amperes

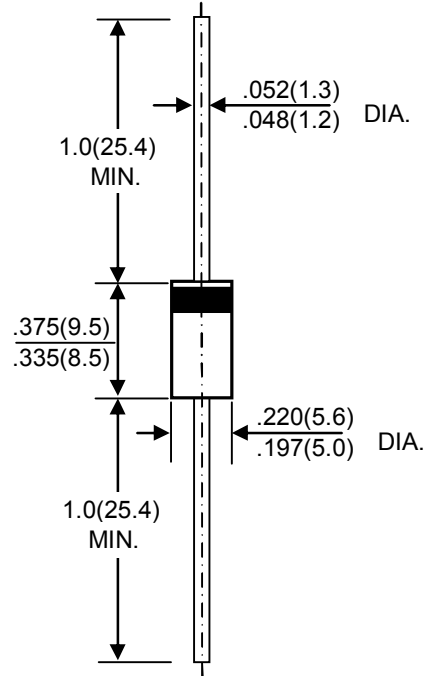
FEATURES

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case: JEDEC DO-27 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.04 ounces , 1.1 grams
- Mounting position: Any

DO-27



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

CHARACTERISTICS	SYMBOL	BY500-50	BY500-100	BY500-200	BY500-400	BY500-600	BY500-800	BY500-1000	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _A =60°C	I _(AV)	5.0							A
Surge Forward Current Half Cycle 50Hz Starting From T _j =25°C	I _{FSM}	200							A
Maximum Forward Voltage at 5.0A DC	V _F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	5.0							µA
Reverse Recovery Time From I _F =1A to V _R =30V	T _{rr}	150			250		500		ns
Typical Thermal Resistance (Note1)	R _{θJA}	60							K/W
Operating Temperature Range	T _J	150							°C
Storage Temperature Range	T _{STG}	-65 to +175							°C

NOTES:1.Thermal resistance junction of lead.