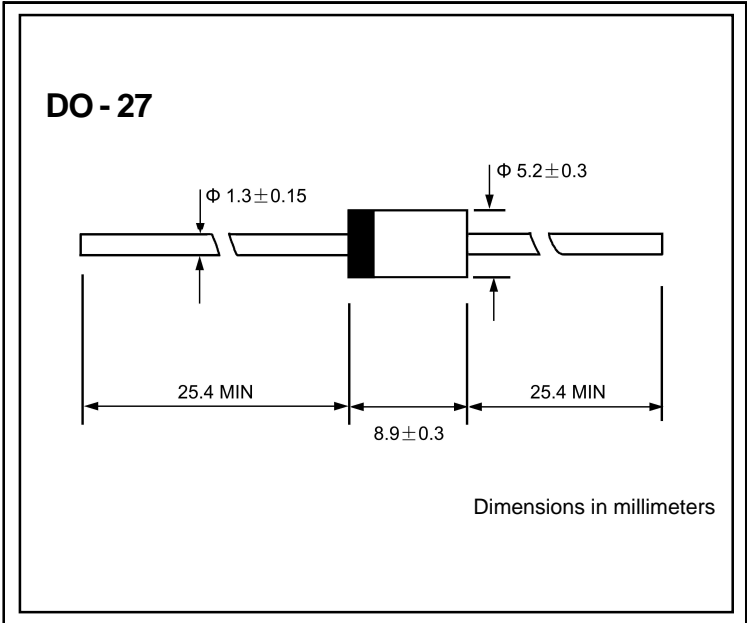


**BY550-50 --- BY550-1000**

**PLASTIC SILICON RECTIFIERS**

**VOLTAGE RANGE: 50 --- 1000 V**  
**CURRENT: 5.0 A**

- FEATURES**
- ◇ Low cost
  - ◇ Diffused junction
  - ◇ Low leakage
  - ◇ Low forward voltage drop
  - ◇ High current capability
  - ◇ Easily cleaned with Freon,Alcohol,Isopropanol and similar solvents
  - ◇ The plastic material carries U/L recognition 94V-0
- MECHANICAL DATA**
- ◇ Case:JEDEC DO-27,molded plastic
  - ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
  - ◇ Polarity: Color band denotes cathode
  - ◇ Weight: 0.041 ounces, 1.15 grams
  - ◇ Mounting position: Any

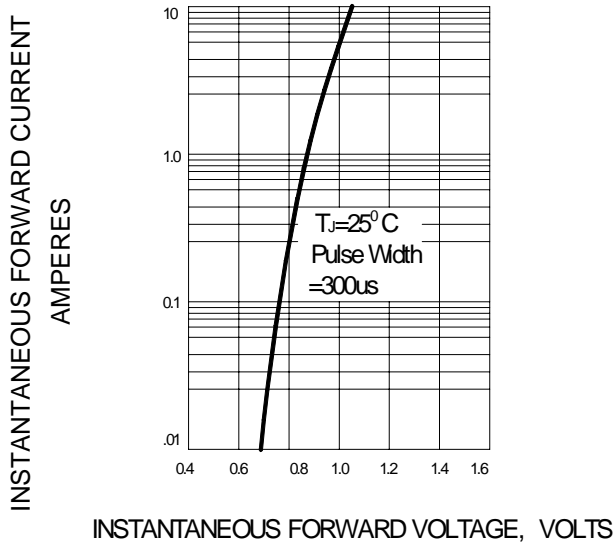


**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**  
 Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

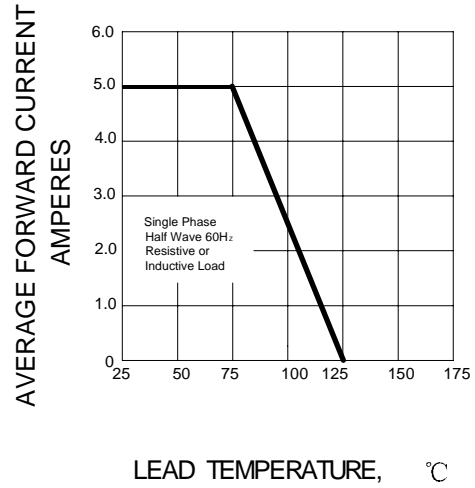
		BY 550-50	BY 550-100	BY 550-200	BY 550-400	BY 550-600	BY 550-800	BY 550-1000	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$	$I_{F(AV)}$	5.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	250.0							A
Maximum instantaneous forward voltage @ 5.0 A	$V_F$	1.1							V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	$I_R$	10.0 100.0							$\mu A$
Typical junction capacitance (Note1)	$C_J$	55							pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	30							$^\circ C/W$
Operating junction temperature range	$T_J$	- 55 ---- + 125							$^\circ C$
Storage temperature range	$T_{STG}$	- 55 ---- + 150							$^\circ C$

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
 2. Thermal resistance from junction to ambient.

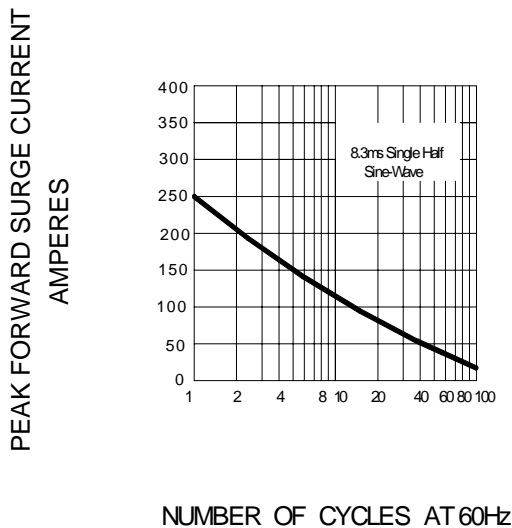
**FIG.1 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.2 – TYPICAL FORWARD DERATING CURVE**



**FIG.3 – PEAK FORWARD SURGE CURRENT**



**FIG.4 – TYPICAL JUNCTION CAPACITANCE**

