

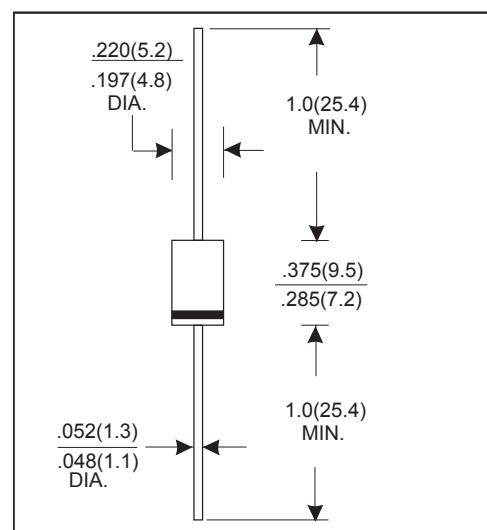
## DO-27 PLASTIC SILICON RECTIFIERS

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- High surge current capability
- 3.0A operation at  $T_L=75^\circ\text{C}$  with no thermal runaway
- Typical IR less than 0.1  $\mu\text{A}$
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

### MECHANICAL DATA

- Case: JEDEC DO-27 molded plastic body
- Mounting Position: Any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

	Symbols	1N 5400	1N 5401	1N 5402	1N 5403	1N 5404	1N 5405	1N 5406	1N 5407	1N 5408	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage to $T_A=105^\circ\text{C}$	$V_{DC}$	50	100	200	300	400	500	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length, @ $T_A=105^\circ\text{C}$	$I_{(AV)}$	3.0									Amps
Peak Forward Surge Current(8.3ms)half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200									Amps
Maximum Instantaneous Forward Voltage at 3.0 A	$VF$	1.0									Volts
Maximum Reverse current at rated DC Blocking Voltage	$I_R$	$T_A=25^\circ\text{C}$	10								
			100								
Typical Thermal Resistance(Note 2)	$R_{JA}$	40									C/W
Typical Junction Capacitance(Note 1)	$C_J$	50									PF
Operating and Storage Temperature Range	$T_J$	$T_{STG}$	-65 to +150								

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.375"(9.5mm) lead length.

## RATINGS AND CHARACTERISTIC CURVES

FIG.1: FORWARD CURRENT DERATING CURVE

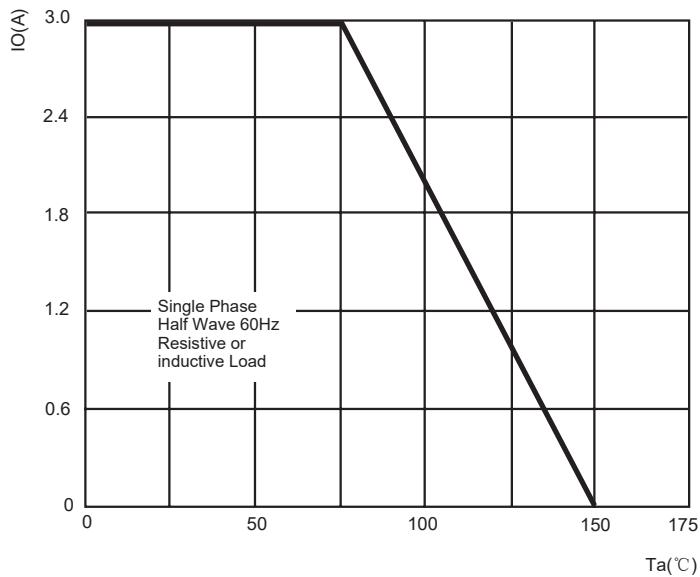


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

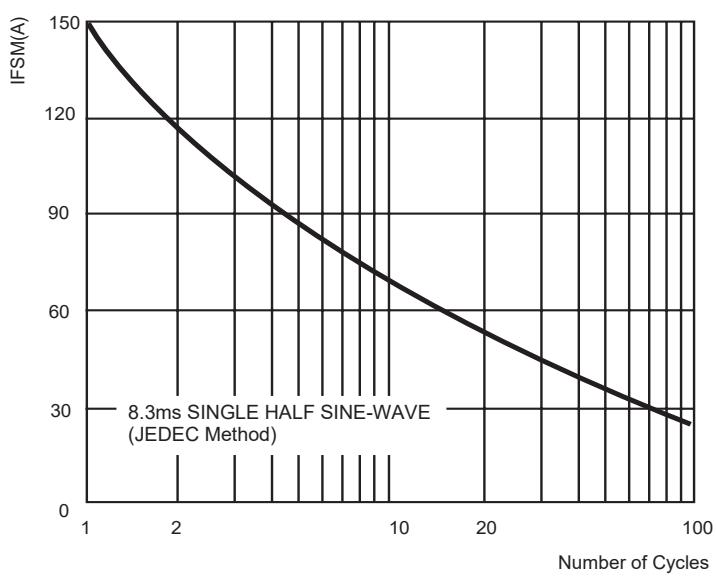


FIG.3: TYPICAL FORWARD CHARACTERISTICS

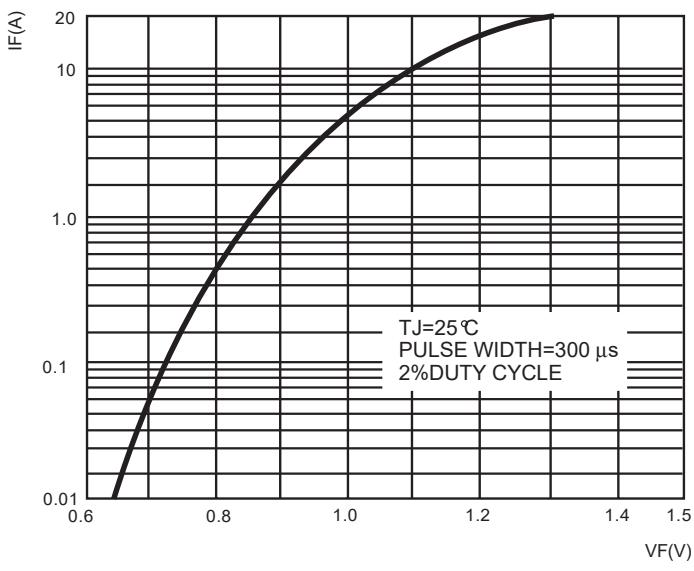


FIG.4: TYPICAL REVERSE CHARACTERISTICS

