

PLASTIC SILICON RECTIFIER

VOLTAGE RANGE: 50 TO 1000VOLTS

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-O

MECHANICAL DATA

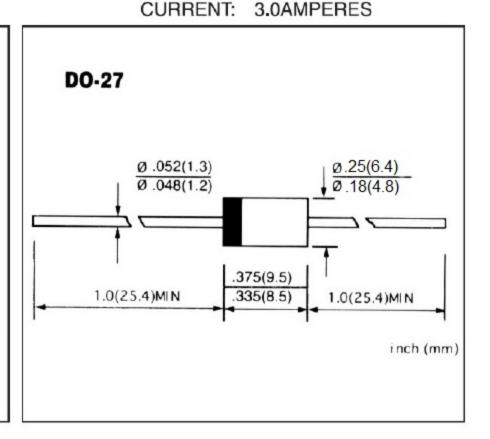
Case: JEDEC DO-27, molded plastic

Terminals: Axial leads, solder able per MIL-STD-202,

Method 208

Polarity: Color band denotes cathode Weight: 0.041 ounce, 1.15 gram

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 current by 20%.

Parameters		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	٧
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	350	420	560	700	٧
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	500	600	800	1000	٧
Maximum Average Forward Rectified Current 9.5mm Lead Length, @ T _A =75°C	I _(AV)	3.0								Α	
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load @T _j =125℃	I _{FSM}	200								А	
Maximum Instantaneous Forward Voltage at 3.0A	VF	1.0								٧	
Maximum Reverse Current @T _A =25°C at Rated DC Blocking Voltage @T _A =100°C	I _R	10 100								μ A	
Typical Junction Capacitance (Note 1)	C_{j}	35									pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20									°C/W
Operating Junction Temperature Range	Tj	-65+150								$^{\circ}\!\mathbb{C}$	
Storage Temperature Range	T _{STG}	- 65+150									$^{\circ}\!\mathrm{C}$

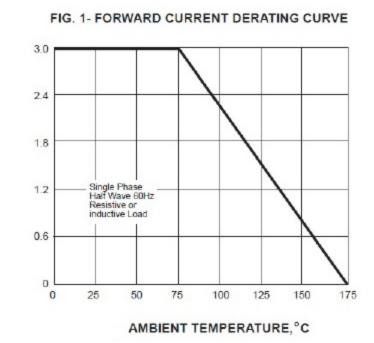
NOTE: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Thermal Resistance Junction to Ambient.



RATINGS AND CHARACTERISTIC CURVES







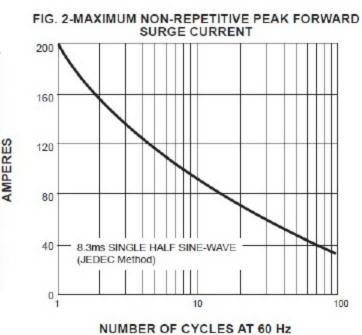


FIG. 3-TYPICAL INSTANTANEOUS FORWARD

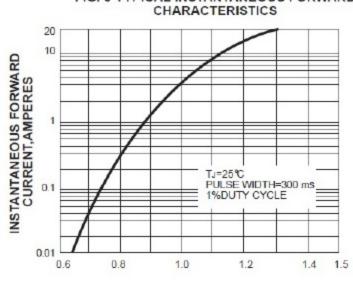
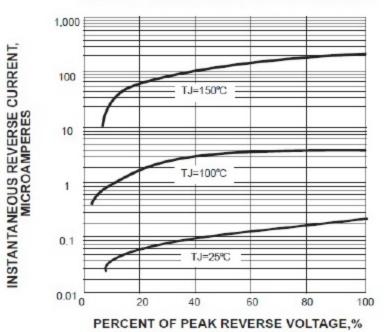


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



INSTANTANEOUS FORWARD VOLEAGE,

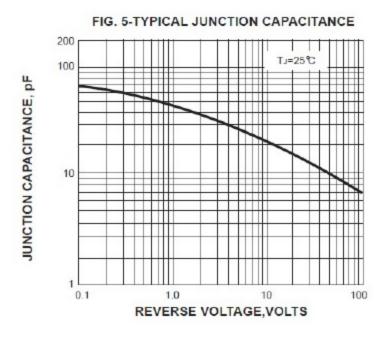
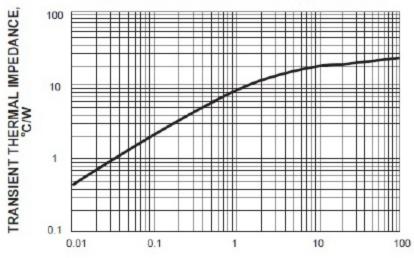


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t,PULSE DURATION,sec.