

PLASTIC SILICON RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **3.0** Amperes

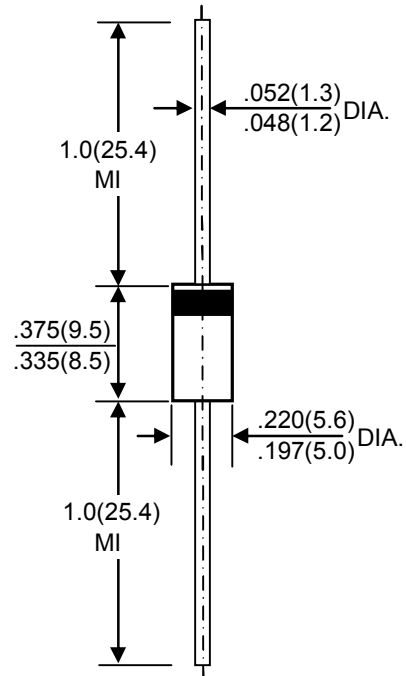
FEATURES

- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- 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 , 1.1grams
- 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	1N 5400	1N 5401	1N 5402	1N 5403	1N 5404	1N 5405	1N 5406	1N 5407	1N 5408	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current @T _A =55 °C	I _(AV)	3.0									A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Supe Imposed on Rated Load(JEDEC Method)	I _{FSM}	200									A
Maximum Forward Voltage at 3.0A DC	V _F	1.2									V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	5.0 50									uA
Typical Junction Capacitance (Note1)	C _J	50						35			pF
Typical Thermal Resistance (Note2)	R _{θJA}	15									°C/W
Operating Temperature Range	T _J	-55 to +125									°C
Storage Temperature Range	T _{STG}	-55 to +150									°C

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

2.Thermal resistance junction of ambient.



FIG. 1 – FORWARD CURRENT DERATING CURVE

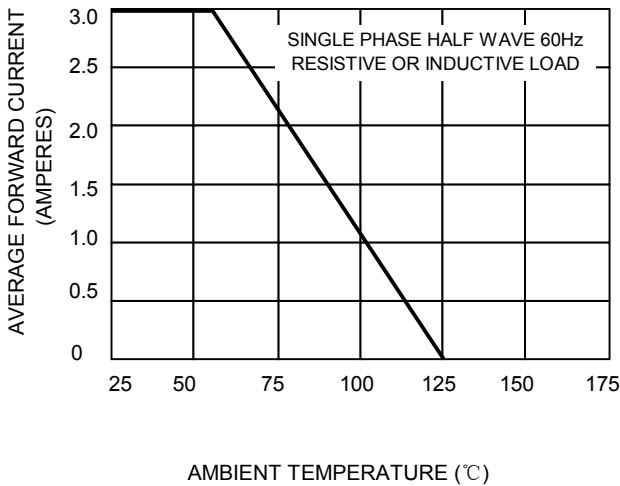


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

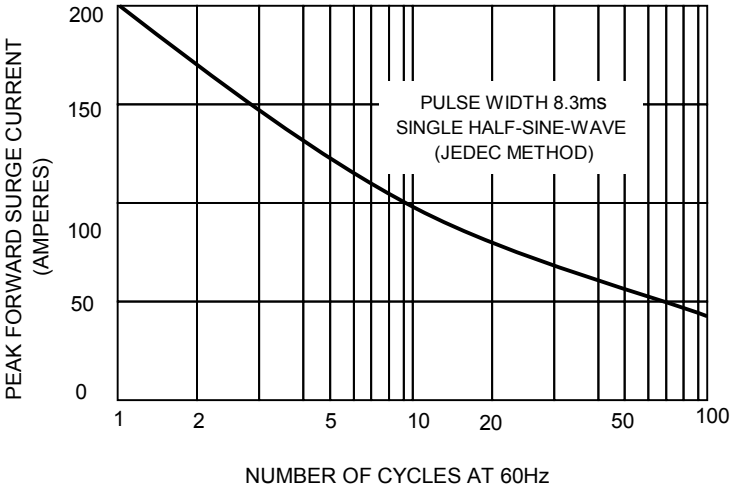


FIG.3 – TYPICAL JUNCTION CAPACITANCE

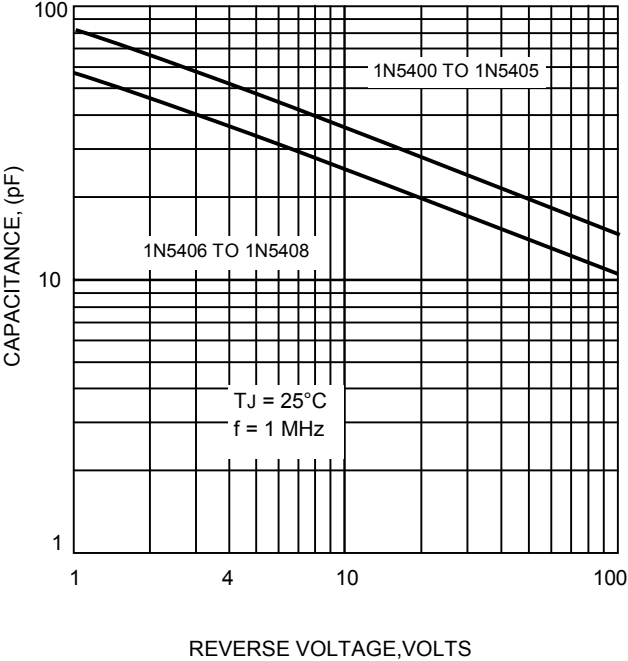


FIG.4-TYPICAL FORWARD CHARACTERISTICS

