

PLASTIC SILICON RECTIFIERS

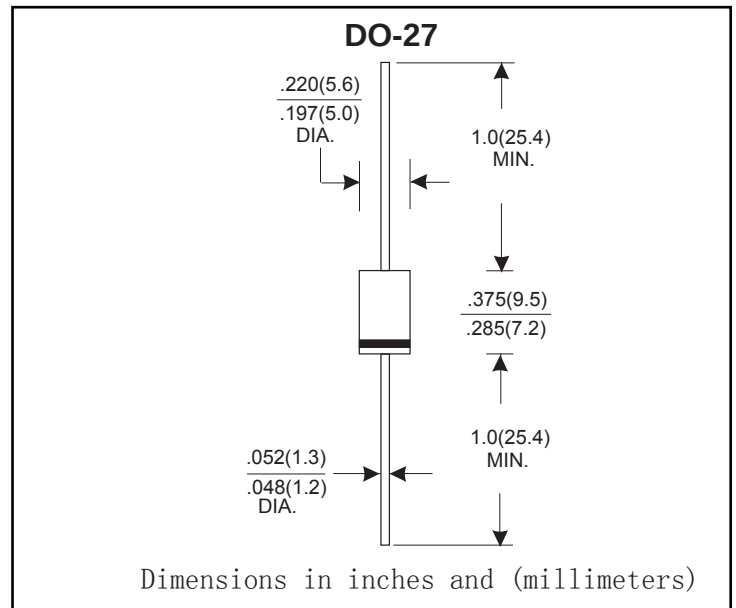
VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 3.0 A

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High surge current capability
- 3.0A poeration at TL=75°C with no thermal runaway
- Typical IR less than 0.1 μ A
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: JEDEC DO-27 molded plastic body
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014ounce, 0.33 gram



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		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℃		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℃		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		V _F	1.0									Volts
Maximum Reverse current at rated DC Blocking Voltage	T _A =25 C	I _R	10.0									A
	T _A =100 C		100.0									
Typical Thermal Resistance(Note 2)		R _{JA}	40.0									C/W
Typical Junction Capacitance(Note 1)		C _J	50.0									PF
Operating and Storage Temperature Range		T _J	-65 to+150									℃
		T _{STG}										

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

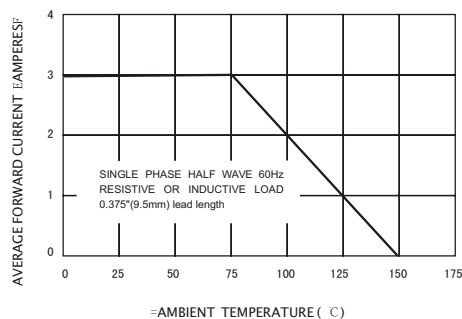


FIG.2-TYPICAL INSTANTANEOUS FORWARD VOLTAGE.(V)

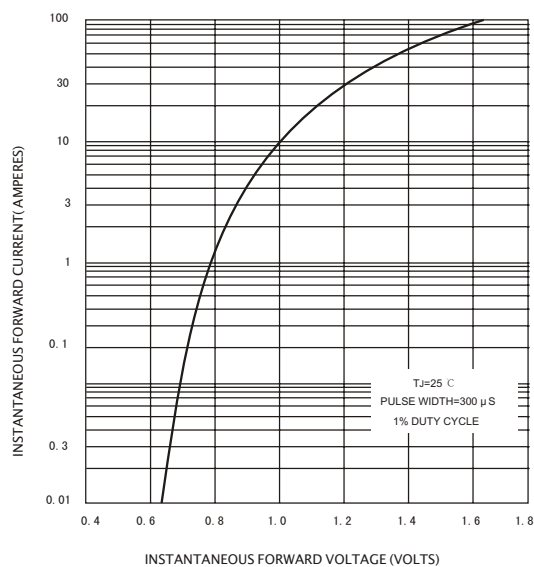


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

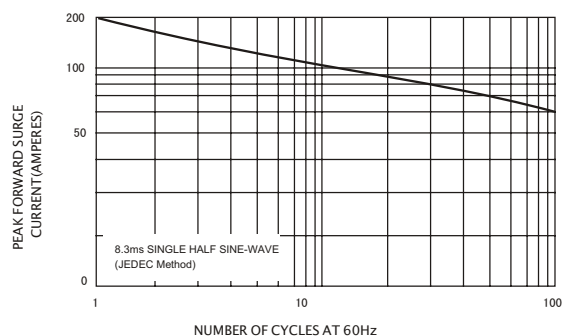


FIG.4-TYPICAL REVERSE CHARACTERISTICS

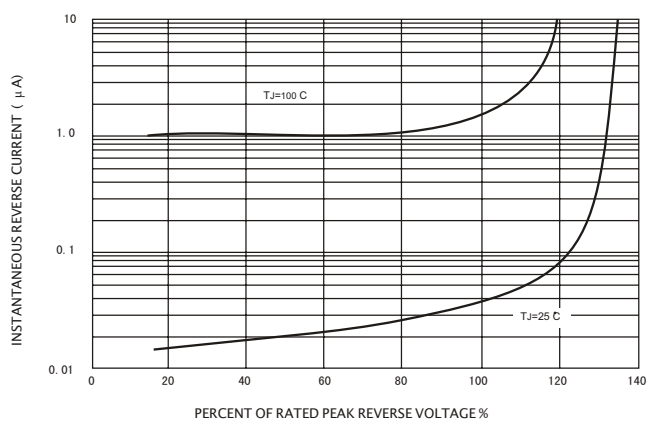


FIG.5-TYPICAL JUNCTION CAPACITANCE

