

PLASTIC SILICON RECTIFIERS

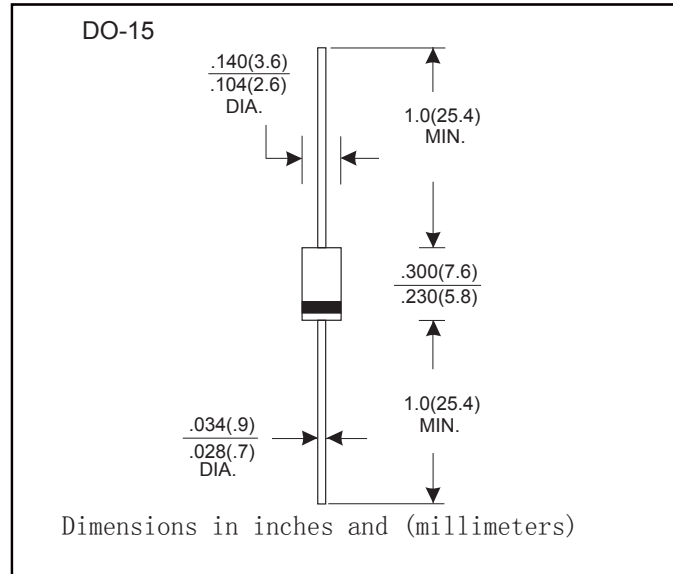
VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 1.5 A

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High surge current capability
- 1.5A operation at TL=70°C with no thermal runaway
- Low reverse leakage
- High forward surge current capability

MECHANICAL DATA

- Case:JEDEC DO-15 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 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	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	V_{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm)lead length at TA=75°C	$I_{(AV)}$	1.5									Amps
Peak Forward Surge Current(8.3ms)half sine-wave cuperimposed on rated load (JEDEC method)	I_{FSM}	50.0									Amps
Maximum Instantaneous Forward Voltage at 1.5 A	V_F	1.1									Volts
Maximum Reverse current at rated DC Blocking Voltage	I_R	$T_A=25\text{ C}$									A
		$T_A=100\text{ C}$									
Typical Thermal Resistance(Note 2)	R_{JA}	60.0									C/W
Typical Junction Capacitance(Note 1)	C_J	50.0									PF
Operating and Storage Temperature Range	T_J	-65 to+150									C
	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

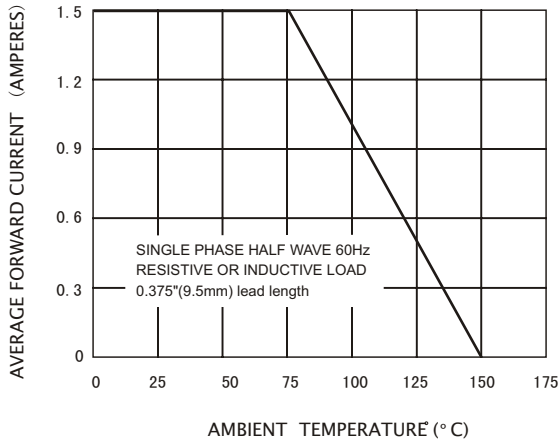


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

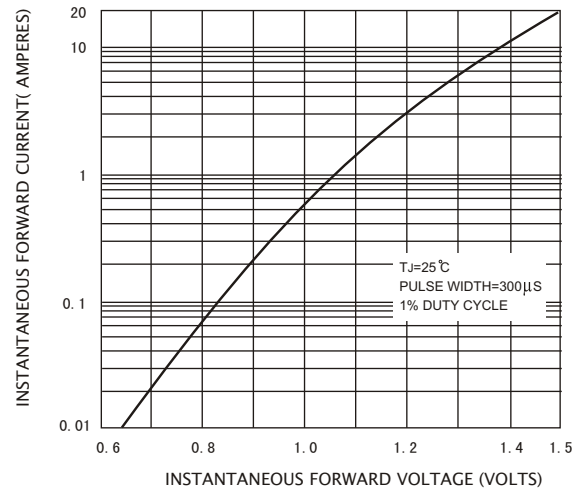


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

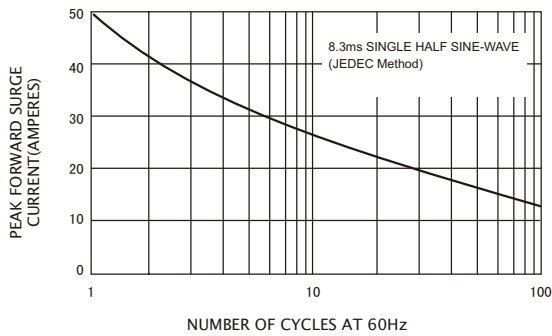


FIG.4-TYPICAL REVERSE CHARACTERISTICS

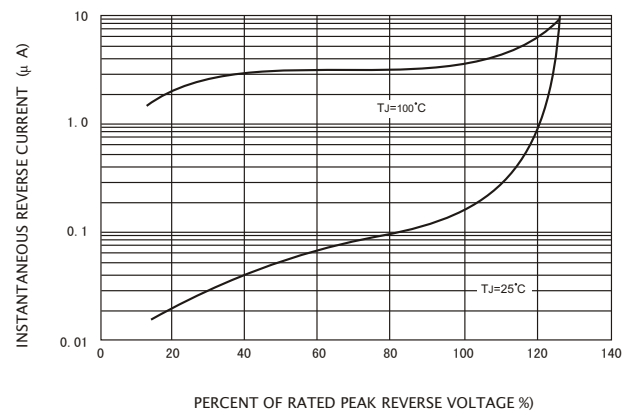


FIG.5-TYPICAL JUNCTION CAPACITANCE

