

## PLASTIC SILICON RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts  
 FORWARD CURRENT - **1.5** Amperes

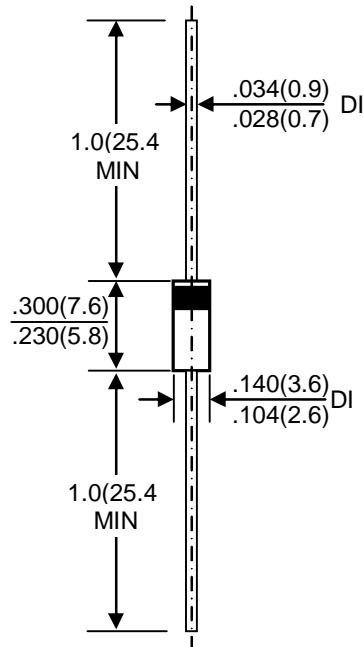
### FEATURES

- 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-15 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.015 ounces , 0.4 grams
- Mounting position: Any

### DO-15



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 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =70 °C	I <sub>(AV)</sub>	1.5									A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	50									A
Maximum Forward Voltage at 1.5A DC	V <sub>F</sub>	1.1									V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0									uA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	20									pF
Typical Thermal Resistance (Note2)	R <sub>θJA</sub>	26									°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125									°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150									°C

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

2.Thermal resistance junction of lead.

FIG. 1 – FORWARD CURRENT DERATING CURVE

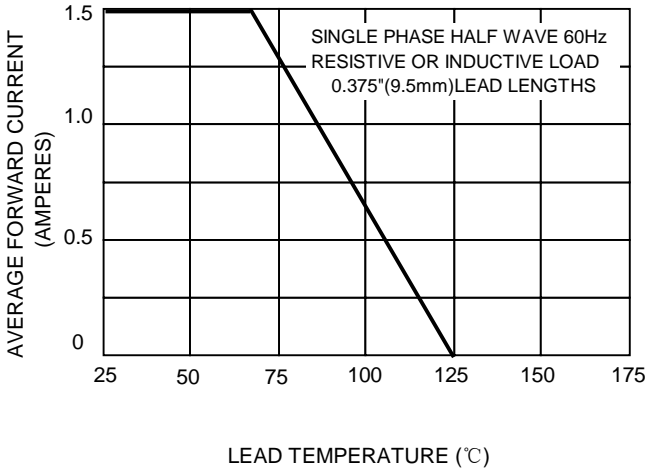


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

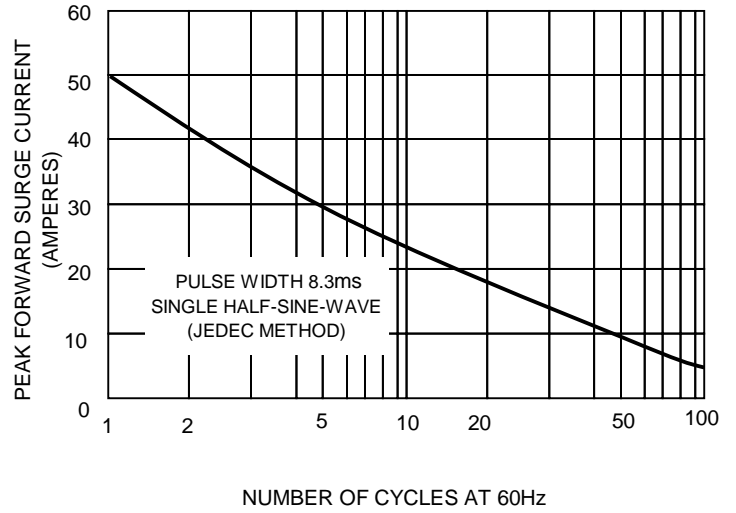


FIG.3 – TYPICAL JUNCTION CAPACITANCE

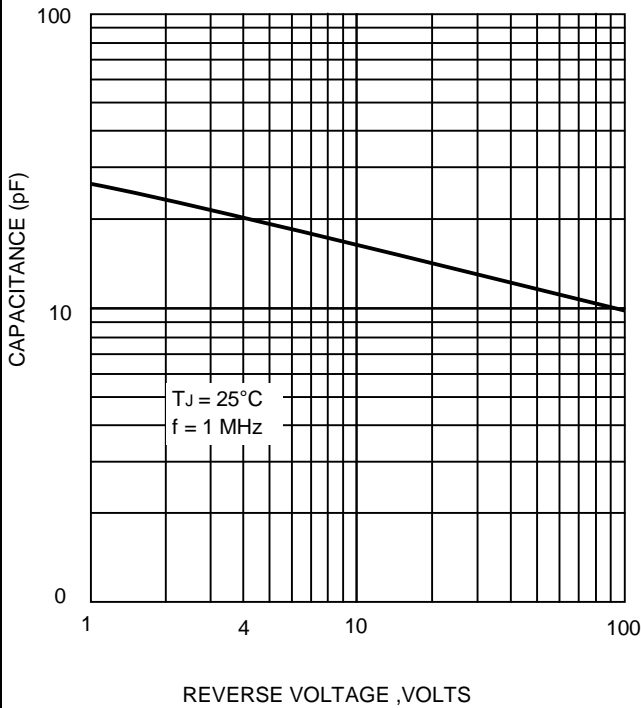


FIG.4-TYPICAL FORWARD CHARACTERISTICS

