

PLASTIC SILICON RECTIFIERS

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

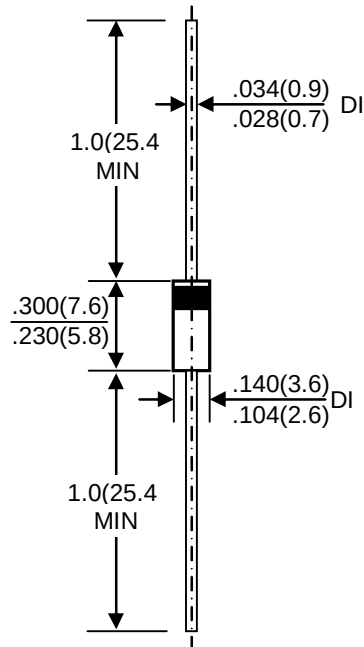
FEATURES

- 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 _{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 =70 °C	I _(AV)	1.5									A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	50									A
Maximum Forward Voltage at 1.5A DC	V _F	1.1									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	20									pF
Typical Thermal Resistance (Note2)	R _{θJA}	26									°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 lead.

FIG. 1 – FORWARD CURRENT DERATING CURVE

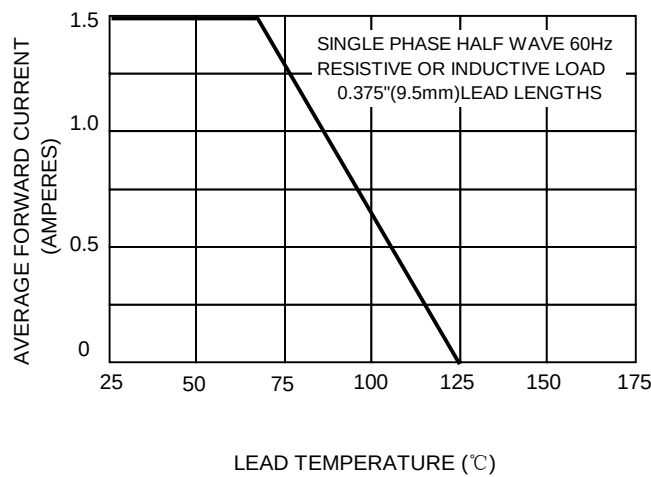


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

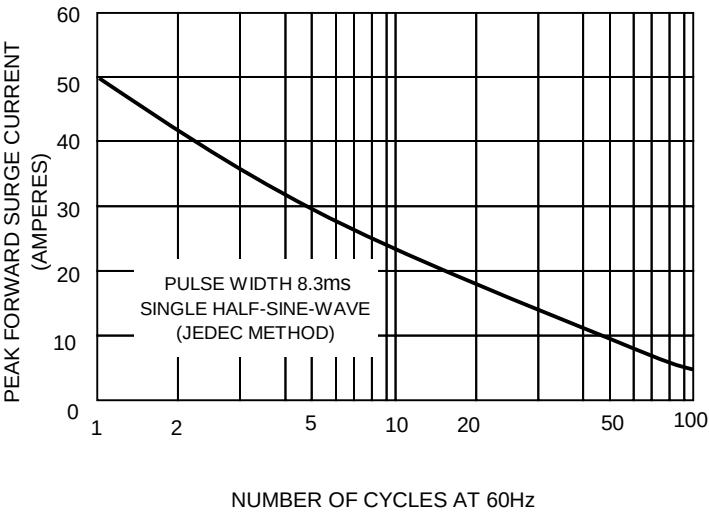


FIG.3 – TYPICAL JUNCTION CAPACITANCE

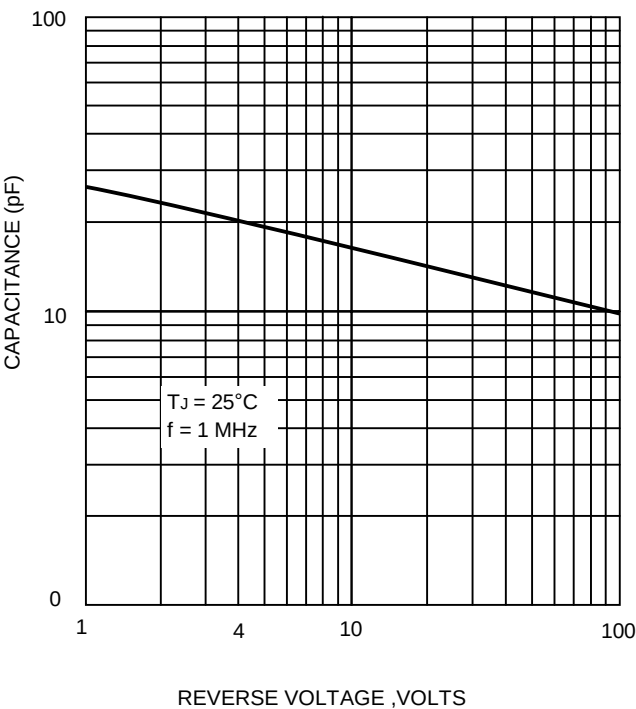


FIG.4-TYPICAL FORWARD CHARACTERISTICS

