

PLASTIC SILICON RECTIFIERS

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

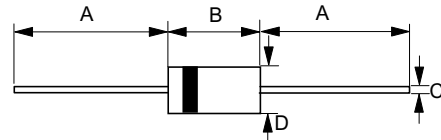
FEATURES

- 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



DO-15		
Dim.	Min.	Max.
A	25.4	-
B	5.80	7.60
C	0.70 $\varnothing$	0.90 $\varnothing$
D	2.60 $\varnothing$	3.60 $\varnothing$
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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 .375"(9.5mm) Lead Lengths @T _L =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 at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	5.0 50									uA
Typical Junction Capacitance (Note 1)	C _J	15									pF
Typical Thermal Resistance (Note 2)	R _{θJL}	50									°C/W
Operating Temperature Range	T _J	-55 to +150									°C
Storage Temperature Range	T _{STG}	-55 to +150									°C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to Lead .

RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

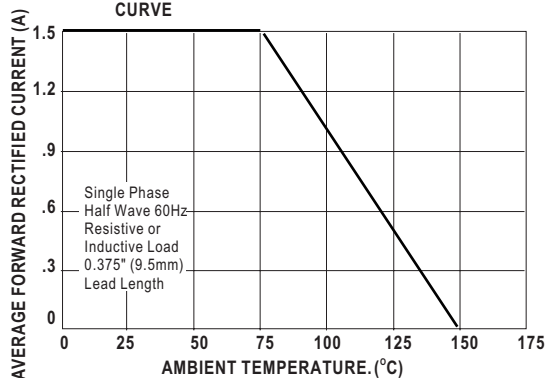


FIG.2- TYPICAL FORWARD CHARACTERISTICS

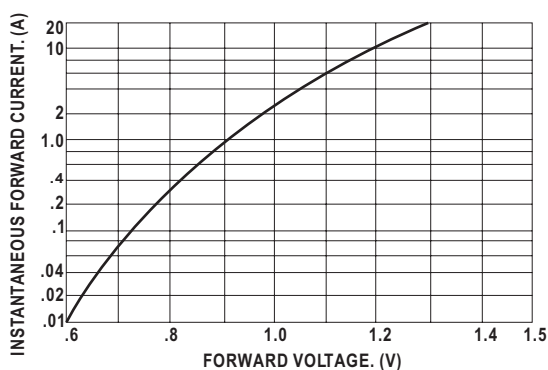


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

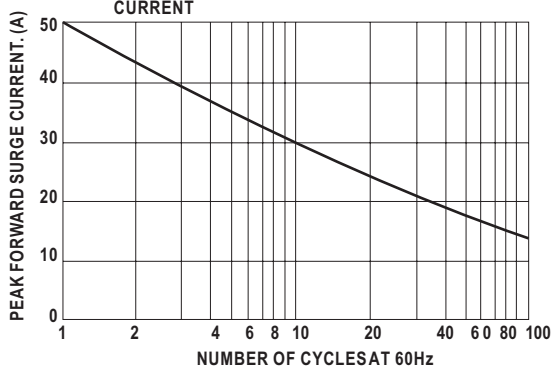


FIG.4- TYPICAL REVERSE CHARACTERISTICS

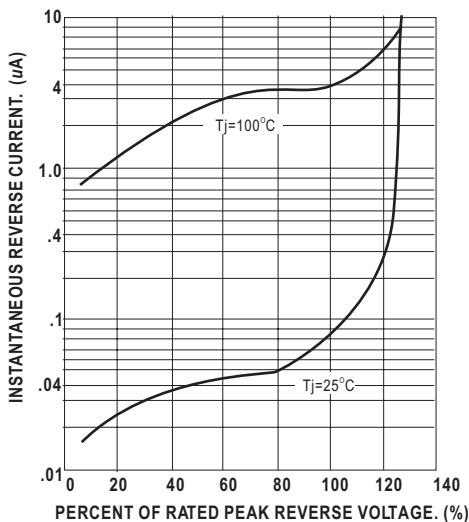


FIG.5- TYPICAL JUNCTION CAPACITANCE

