LITE ON POWER SEMICONDUCTOR

IN5391 thru IN5399

PLASTIC SILICON RECTIFIERS

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

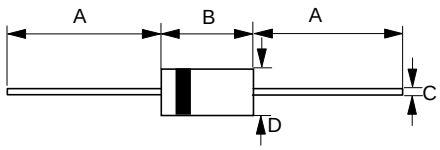
FEATURES

- 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	0.71 ∅	0.86 ∅
D	2.60 ∅	3.60 ∅
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	IN 5391	IN 5392	IN 5393	IN 5394	IN 5395	IN 5396	IN 5397	IN 5398	IN 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 @T_J=25˚C at Rated DC Blocking Voltage @T_J=100˚C	I_R	5.0 50									uA
Typical Junction Capacitance (Note 1)	C_J	20									pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	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 1.0MHz and applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to Lead .

REV. 1, 24-May-2000

FIG.1 - FORWARD CURRENT DERATING CURVE

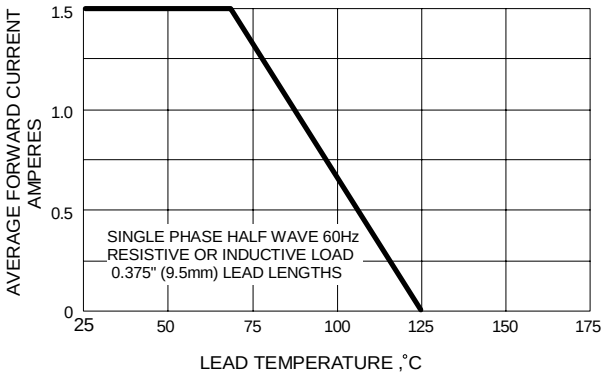


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

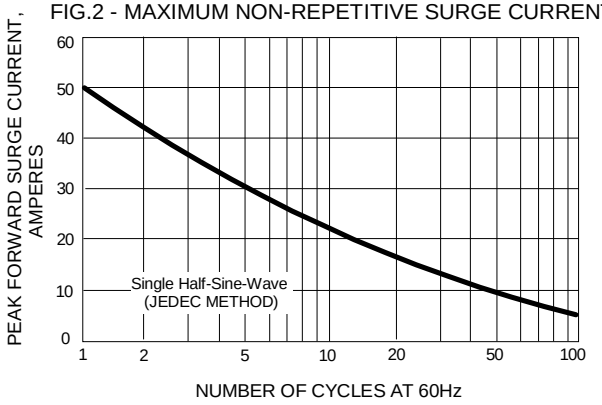


FIG.3 - TYPICAL JUNCTION CAPACITANCE

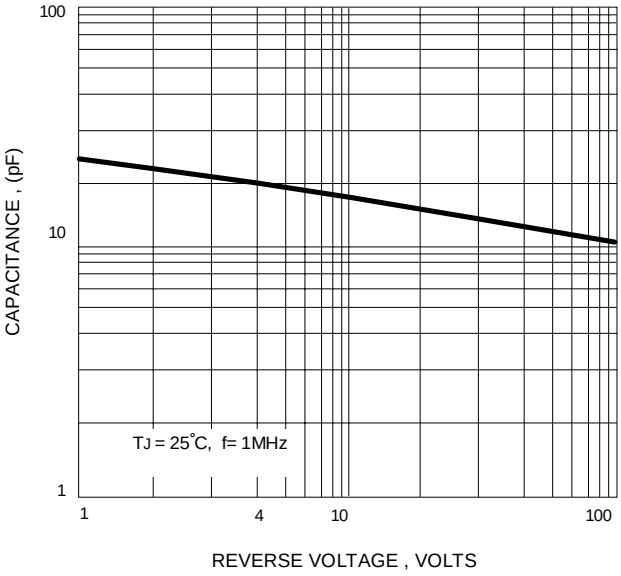


FIG.4 - TYPICAL FORWARD CHARACTERISTICS