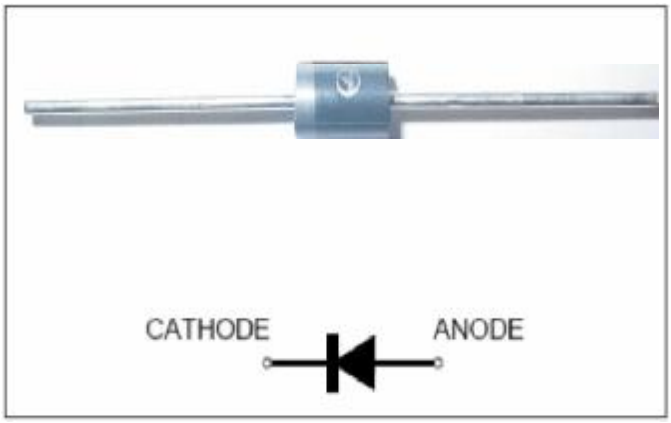
LESHAN RADIO COMPANY, LTD.

1N5391 thru 1N5399

General Purpose Plastic Rectifiers
Reverse Voltage 50 to 1000V Forward Current 1.5A

FEATURES

* Plastic package has Underwriters Laboratories Flammability Classification 94V-0
* Construction utilizes void-free molded plastic technique
* Low reverse leakage
* High forward surge capability
* Diffused junction
* High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



we declare that the material of product is halogen free (green epoxy compound).

Mechanical Data

Case: JEDEC DO-15, molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.015 oz., 0.40 g

Handling precautin:None

1.Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	Unit
Maximum repetitive 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 0.375" (9.5mm) lead length at T_A = 75°C	IF(AV)	1.5									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50									A
Maximum full load reverse current, full cycle average,0.375"(9.5mm) lead lengths at T_A = 70°C	IR(AV)	300									μA
Typical thermal resistance (Note 1)	RθJA	50									°C/W
Maximum DC blocking voltage temperature	T_A	150									°C
Operating junction and storage temperature range	TJ, TSTG	–50 to +150									°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	Unit
Maximum instantaneous forward voltage at 1.5A	V_F	1.40									V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 100°C	IR	5.0 300									μA
Typical junction capacitance at 4.0V, 1MHz	CJ	15									PF

NOTES:

1. Thermal resistance from junction to ambient at 0.375” (9.5mm) lead length, P.C.B. mounted

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2.Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

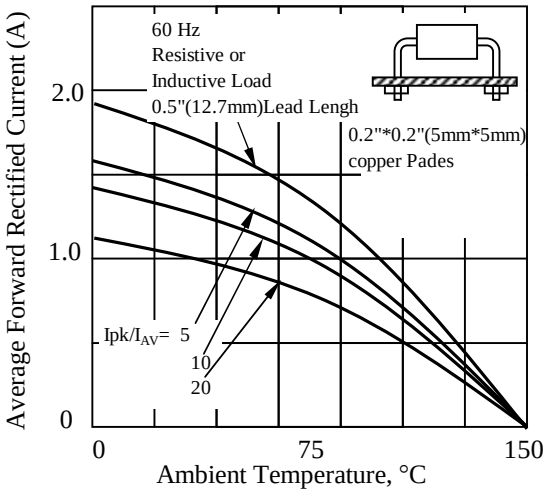


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

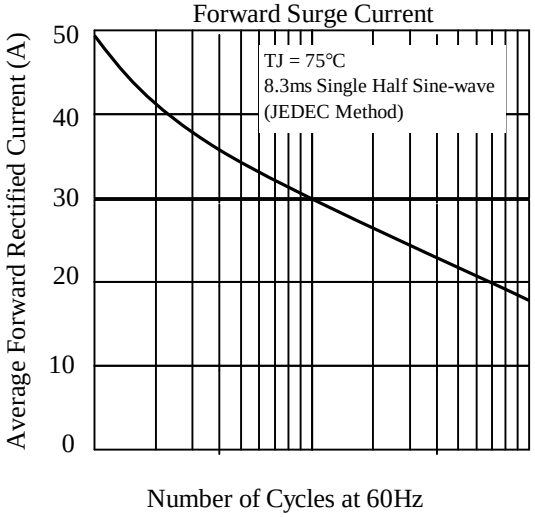


Fig 3. – Typical Instantaneous Forward Characteristics

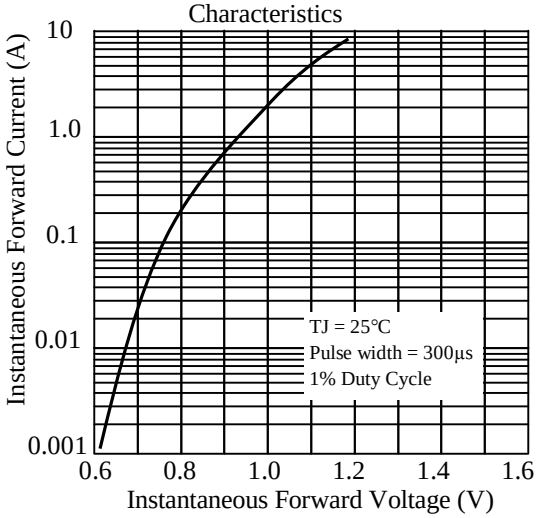


Fig 4. – Typical Reverse Characteristics

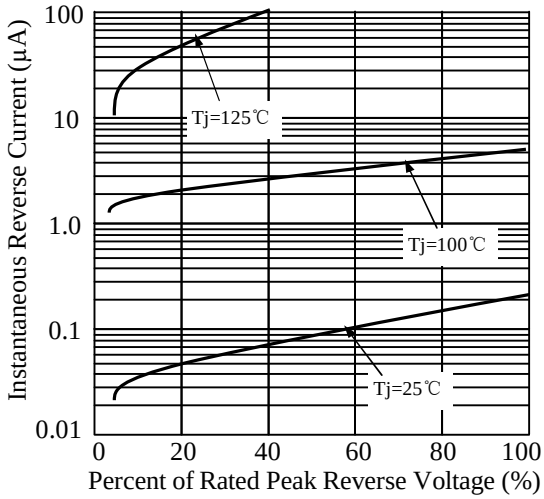


Fig 5. – typical transient thermal impedance

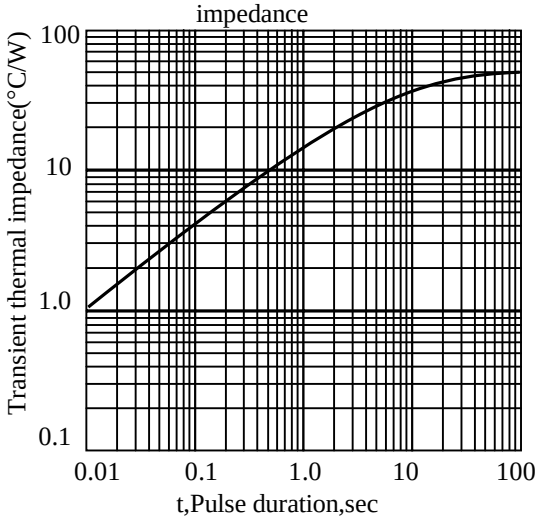
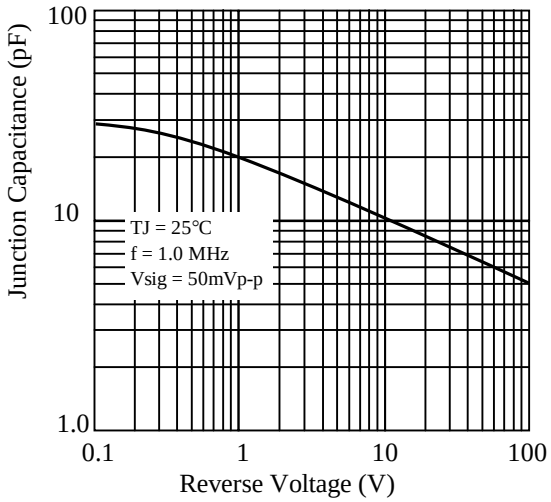


Fig 6. – Typical Junction Capacitance



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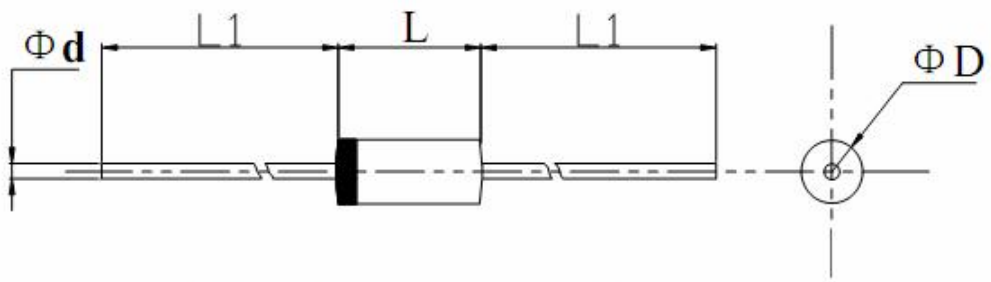
3. dimension:

Package outline



Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
L	0.230	0.300	5.8	7.6
L1	1.0	-	25.4	-
ΦD	0.104	0.140	2.6	3.6
Φd	0.028	0.034	0.7	0.9

Note:
DO-15
molded plastic case
The marking band indicates the cathode