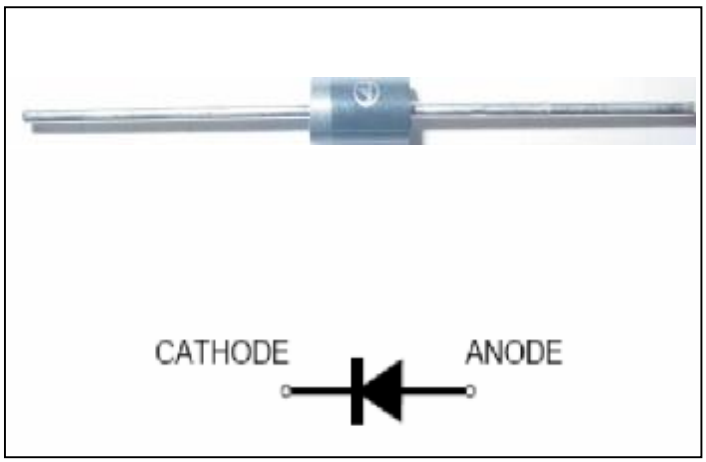
LUR105 thru LUR160

Glass Passivated Junction Ultra Fast Rectifiers

Reverse Voltage 50 to 600V Forward Current 1.0A

FEATURES

* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* High temperature metallurgically bonded construction
* Glass passivated chip
* Capable of meeting environmental standards of MIL-S-19500
* For use in high frequency rectifier circuits
* Fast switching for high efficiency
* 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 compliance with ROHS requirements

Mechanical Data

Case: JEDEC DO-41, molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.011oz., 0.284 g
Handling precautin:None

1.Electrical Characteristic

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

0.5

Parameter Symbol	symbol	LUR 105	LUR 110	LUR 115	LUR 120	LUR 140	LUR 150	LUR 160	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	400	500	600	V
Maximum RSM voltage	V_{RSM}	35	70	105	140	280	350	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	400	500	600	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA = 55°C	IF(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Maximum full load reverse current, full cycle average,0.375"(9.5mm) lead lengths at T_A = 75°C	IR(AV)	100							μA
Typical thermal resistance (Note 2)	RθJA	60							°C/W
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	LUR 105	LUR 110	LUR 115	LUR 120	LUR 140	LUR 150	LUR 160	Unit
Maximum Instantaneous Forward Voltage (IF = 1.0 Amps, TJ = 25°C)	V_F	0.93				1.25		1.5	V
Maximum full load reverse current, full cycle average,0.375"(9.5mm) lead lengths (Rated dc Voltage, TJ = 125°C) (Rated dc Voltage, TJ = 25°C)	IR	150 5.0							μA
Typical reverse recovery time (Note 1)	trr	35				50			ns
Typical junction capacitance at 4.0V, 1MHz	CJ	45							PF

NOTES:
1. IF = 0.5A, IR = 1.0A, IRR = 0.25A
2. 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

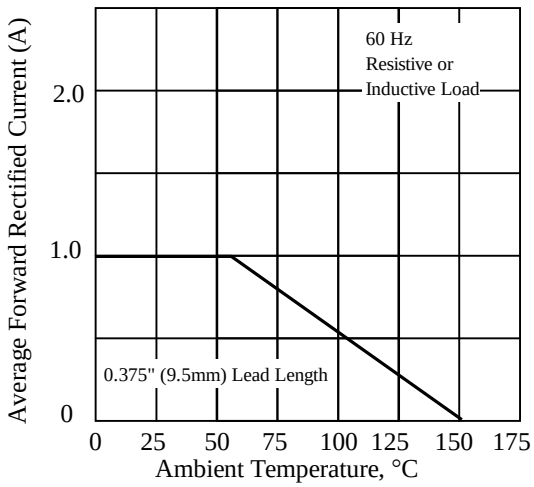


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

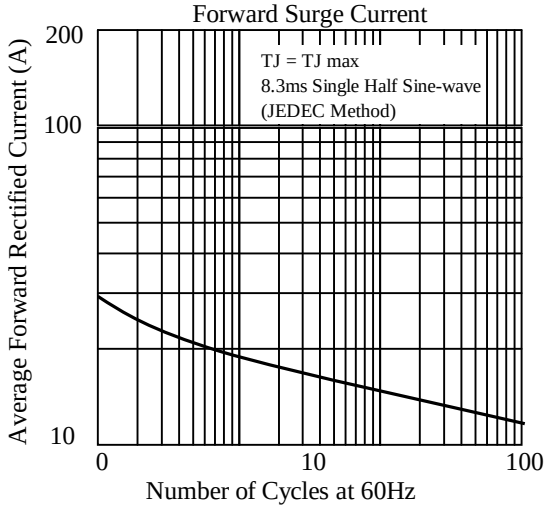


Fig 3. – Typical Instantaneous Forward Characteristics

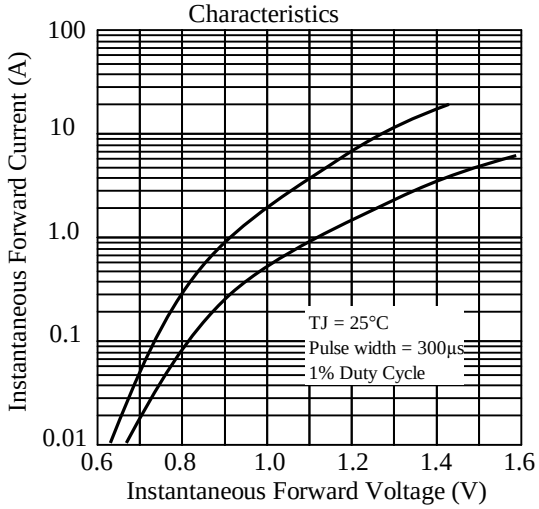


Fig 4. – Typical Reverse Characteristics

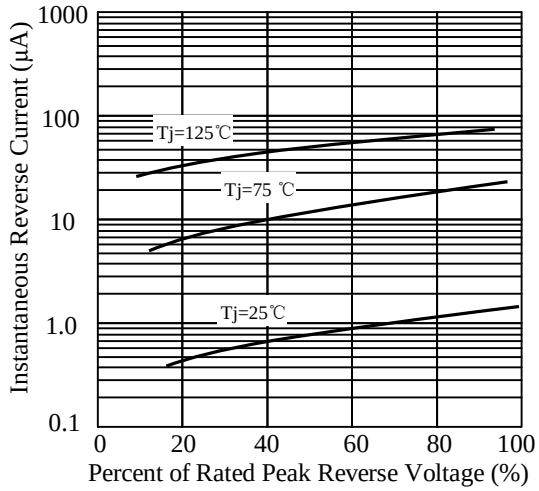


Fig 5. – typical transient thermal impedance

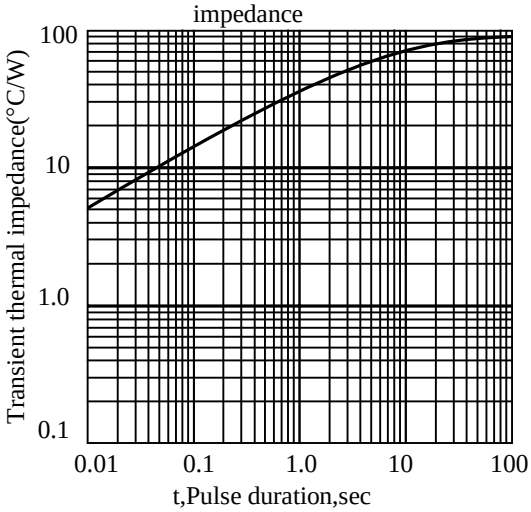
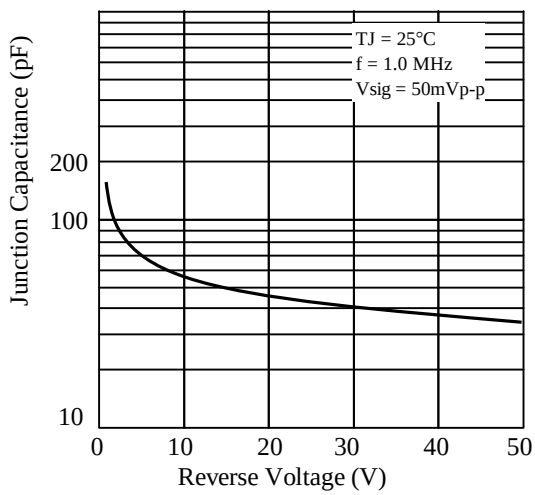


Fig 6. – Typical Junction Capacitance



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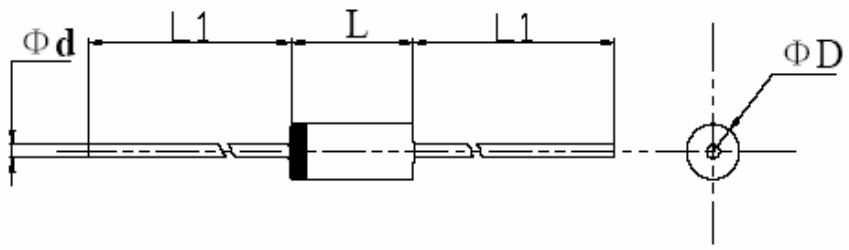
3. dimension:

Package outline



Dimensions					Note:
	inches		mm		DO-41
	Min.	Max.	Min.	Max.	molded plastic case
L	0.166	0.205	4.2	5.2	The marking band indicates the cathode
L1	1.0	-	25.4	-	
ΦD	0.080	0.107	2.0	2.7	
Φd	0.028	0.034	0.7	0.9	

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4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2010-11-8
2	更新版面	周杰	2012-8-1