

MINI MELF Glass-Encapsulate Diodes

Small Signal Fast Switching Diodes

Features

- High reliability
- Low reverse current and low forward voltage

Applications

- Low current rectification and high speed switching



Absolute Maximum Ratings ($T_j = 25^\circ\text{C}$)

Parameter	Test Conditions	Type	Symbol	Value	Unit
Repetitive peak reverse voltage		LL60	VRRM	40	V
		LL60P	VRRM	45	V
Peak forward surge current	$t_p = 1\text{s}$	LL60	IFSM	150	mA
		LL60P	IFSM	500	mA
Forward continuous current	$T_a = 25^\circ\text{C}$	LL60	IF	30	mA
		LL60P	IF	50	mA
Storage temperature range			Tstg	-65~+125	

Maximum Thermal Resistance ($T_j = 25^\circ\text{C}$)

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mm• 50mm• 1.6mm	RthJA	250	K/W

Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	IF=1mA	LL60	VF		0.32	0.5	V
		LL60P	VF		0.24	0.5	V
	IF=30mA	LL60	VF		0.65	1.0	V
	IF=200mA	LL60P	VF		0.65	1.0	V
Reverse current	VR=15V	LL60	IR		0.1	0.5	uA
		LL60P	IR		0.5	1.0	uA
Junction capacitance	VR=1V, f=1MHz	LL60	CJ		2.0		pF
	VR=10V, f=1MHz	LL60P	CJ		6.0		pF
Reverse recovery time	IF=IR=1mA In=1mA RC=100		v			1.0	ns

Typical Characteristics

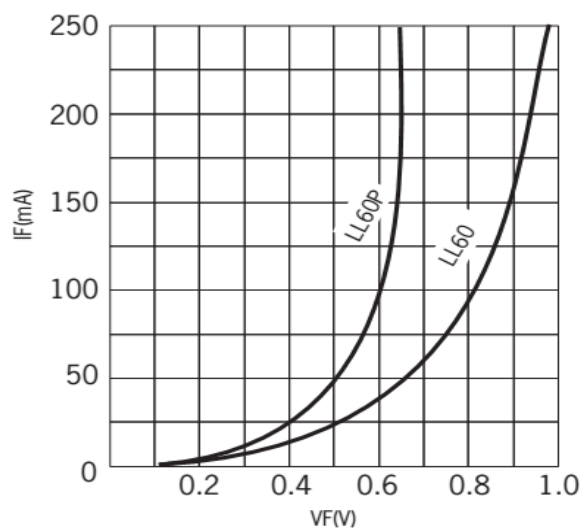


FIG.1 Forward Current vs. Forward Voltage

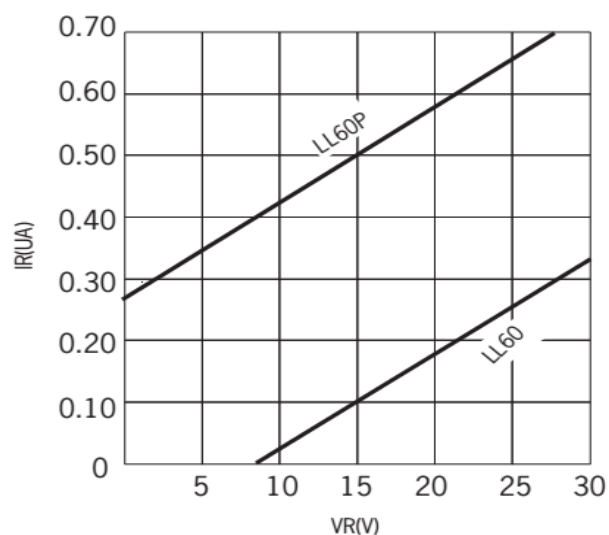


FIG.2 Reverse Current vs. Continuous Reverse Voltage

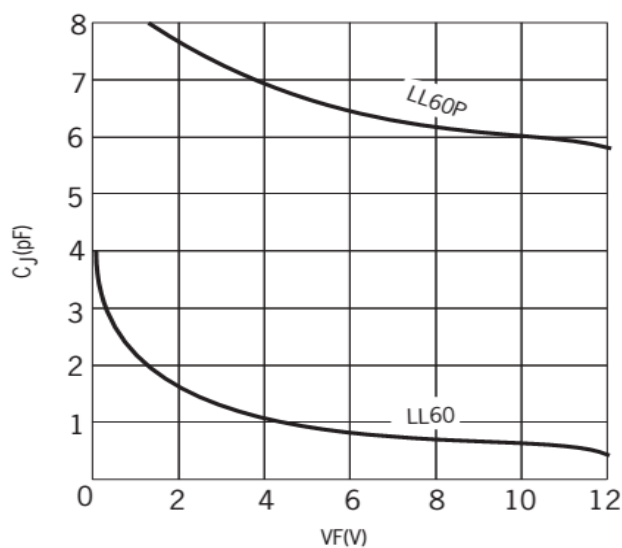
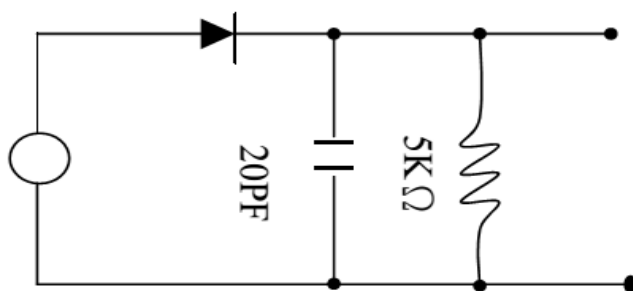


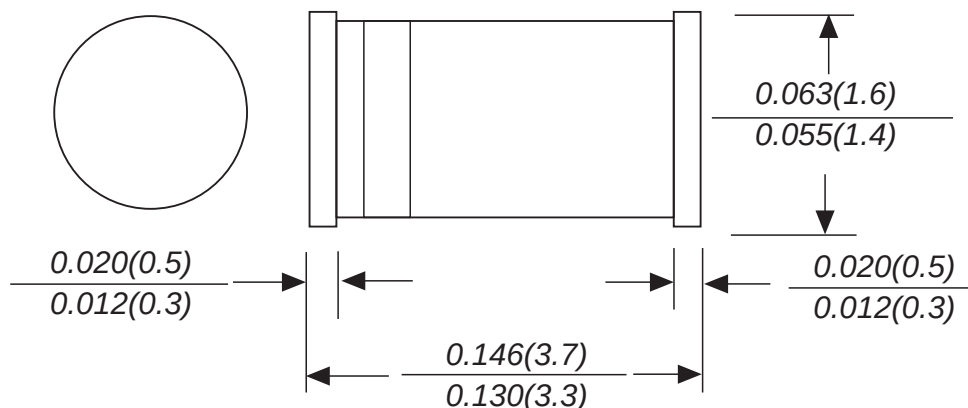
FIG.3 Junction Capacitance vs. Continuous Reverse Applied Voltage



Input 2Vrms

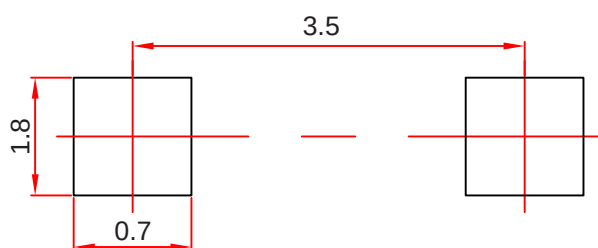
Rectification Efficiency Measurement Circuit

MINI MELF Package Outline Dimensions



Dimensions in millimeters

MINI MELF Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

NOTICE

JSMD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSMD does not assume any liability arising out of the application or use of any product described herein.

Packaging Specifications for Surface Mounted Glass Diodes

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)

