Small Signal Schottky Barrier Diode

Features

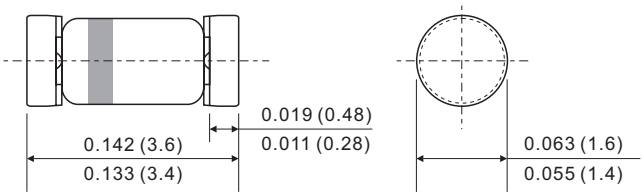
1. High reliability
2. Low reverse current and low forward voltage
3. High temperature soldering guaranteed
   250 °C/10 seconds at terminals

Mechanical Data

Case: MiniMELF Glass Case (SOD-80)
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: approx. 0.002 ounce, 0.05grams

Glass Case MiniMELF (SOD-80)

Dimensions in inches and (mm)



Absolute Maximum Ratings Tamb =25 °C unless otherwise specified

Parameter	Test Condition	Part	Symbol	Value	Unit
Repetitive peak revers voltage		LL60	V_{RRM}	40	V
		LL60P	V_{RRM}	45	V
Peak forward surge current	T_p = 1 s	LL60	I_{FSM}	150	mA
		LL60P	I_{FSM}	500	mA
Forward continuous current	T_{amb} = 25 °C	LL60	I_F	30	mA
		LL60P	I_F	50	mA

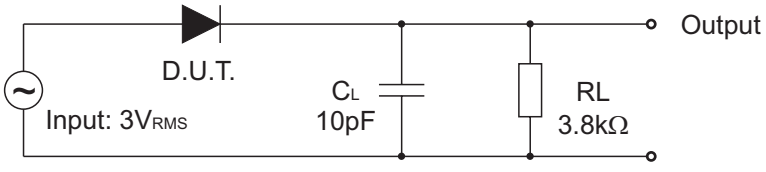
Thermal Characteristics Tamb =25 °C unless otherwise specified

Parameter	Test Condition	Symbol	Value	Unit
Thermal resistance, Junction to ambient	l = 4 mm, T_L = constant	R_{thJA}	250	°C / W
Junction temperature		T_j	125	°C
Storage temperature		T_{stg}	-65 ~ 125	°C

Electrical Characteristics Tamb =25 °C unless otherwise specified

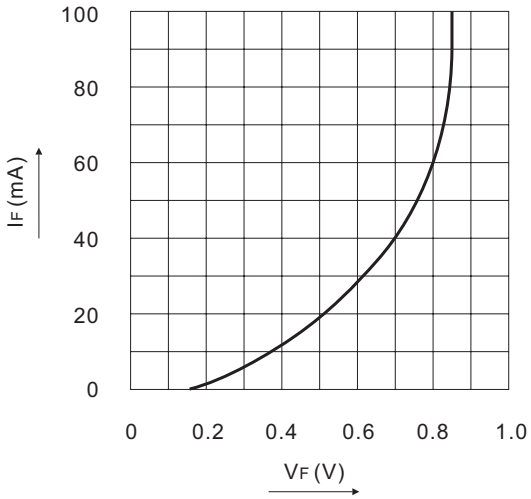
Parameter	Test Condition	Part	Symbol	Min	Typ.	Max	Unit
Forward voltage	I_F = 1 mA	LL60	V_F	—	0.32	0.5	V
		LL60P	V_F	—	0.24	0.5	V
	I_F = 30 mA	LL60	V_F	—	0.65	1.0	V
	I_F = 200 mA	LL60P	V_F	—	0.65	1.0	V
Reverse leakage current	V_R = 15 V	LL60	I_R	—	0.1	0.5	μA
		LL60P	I_R	—	0.5	1.0	μA
Diode capacitance	V_R = 1V, f = 1MHz	LL60	C_{tot}	—	2.0	—	pF
	V_R = 10V, f = 1MHz	LL60P	C_{tot}	—	6.0	—	pF
Detection efficiency (See the measurement circuit)	V_{IN} = 3 V, f = 30 MHz C_L = 10pF, R_L = 3.8kΩ		η	—	0.60	—	—
Reverse recovery time	I_F = 10mA, I_R = 10mA, I_{rr} = 1m, R_L = 100 Ω		trr	—	—	1	ns

Detection Efficiency Measurement Circuit

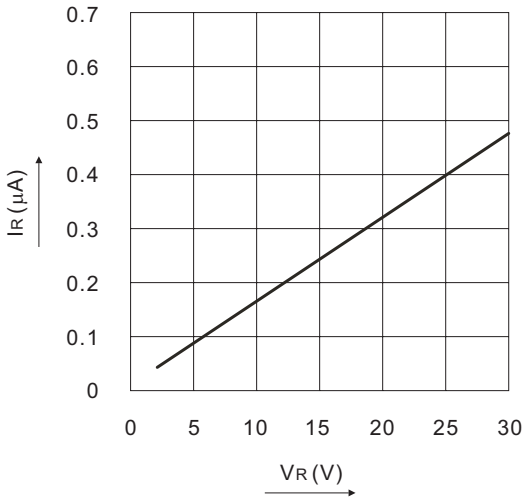


LL60 Ratings and Characteristic Curves T_{amb} = 25 °C unless otherwise specified

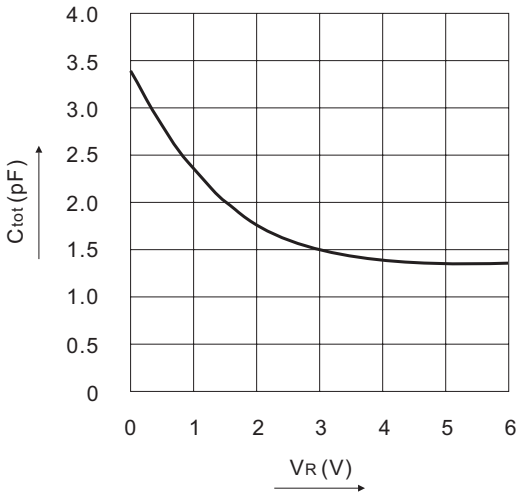
Forward current versus forward voltage (typical values)



Reverse current versus continuous reverse voltage

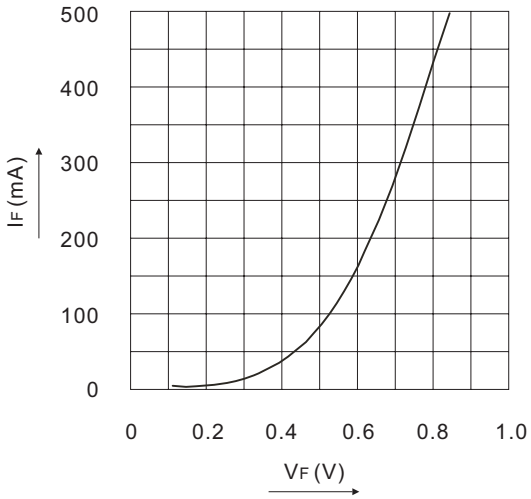


Diode capacitance versus continuous reverse voltage

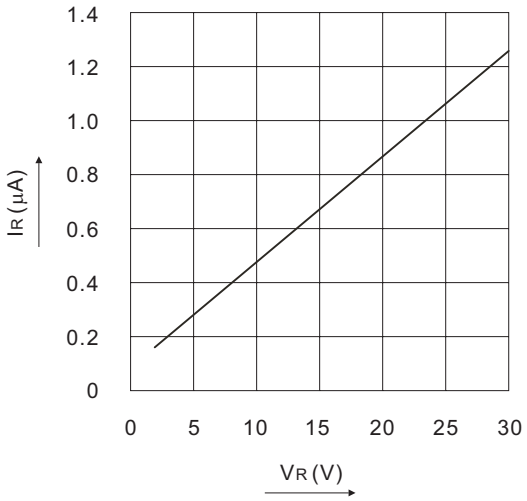


LL60P Ratings and Characteristic Curves T_{amb} = 25 °C unless otherwise specified

Forward current versus forward voltage (typical values)



Reverse current versus continuous reverse voltage



Diode capacitance versus continuous reverse voltage