SEMICONDUCTOR

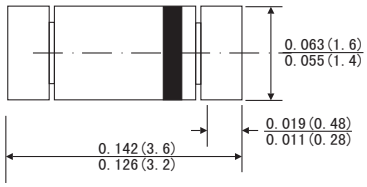
LL60, LL60P

SMALL SIGNAL SCHOTTKY DIODES

FEATURES

- Metal-on-silicon junction, majority carrier conduction
- High current capability, Low forward voltage drop
- Extremely low reverse current IR
- Ultra speed switching characteristics
- Small temperature coefficient of forward characteristics
- Satisfactory wave detection efficiency
- For use in recorder, TV ,radio and telephone as detectors
- Super high speed switching cirits, small current rectifier
- High temperature soldering guaranteed:260℃/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MiniMELF



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: MiniMELF glass case(SOD-80)
- Polarity: Color band denotes cathode end

ABSOLUTE RATINGS(LIMITING VALUES)

Symblos	Parameters	Value		Units
		LL60	LL60P	
V_{RRM}	Repetitive Peak Reverse Voltage	40	40	Volts
IF	Forward Continuous Current T_A=25˚C	30	50	mA
I_{FSM}	Peak Forward Surge Current(t=1s)	150	400	mA
T_{STG}/T_J	Storage and junction Temperature Range	-55 to+125		℃
T_L	Maximum Lead Temperature for Soldering during 10s at 4mm from Case	260		℃

ELECTRICAL CHARACTERISTICS

Symblos	Parameters	Test Conditions		Value			Units
				Min.	Typ.	Max.	
V_F	Forward Voltage	I_F=1mA	LL60		0.35	0.5	Volts
			LL60P		0.26	0.5	
		I_F=30mA	LL60		0.70	1.0	
		I_F=200mA	LL60P		0.70	1.0	
I_R	Reverse Current	V_R=15V	LL60		1.0	5.0	μA
			LL60P		5.0	10.0	
C_J	Junction Capacitance	V_R=1V f=1MHz	LL60		4.0		pF
		V_R=10V f=1MHz	LL60P		10.0		
h	Detection Efficiency(See diagram 4)	V_I=3V f=30MHz C_L=10pF R_L=3.8kW			60		%
t_{rr}	Reverse Recovery time	I_F=I_R=1mA Irr=1mA Rc=100W				1	ns
$R_{\theta JA}$	Junction Ambient Thermal Resistance				400		°C/W

RATINGS AND CHARACTERISTIC CURVES LL60 LL60P

FIG.1-FORWARD CURRENT VERSUS FORWARD VOLTAGE (TYPICAL VALUES)

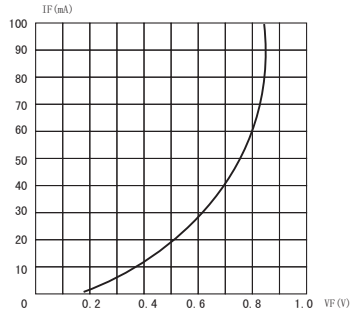


FIG.2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

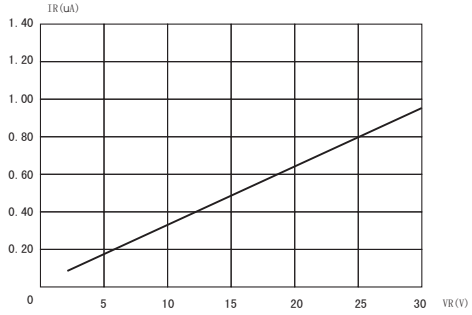


FIG.3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

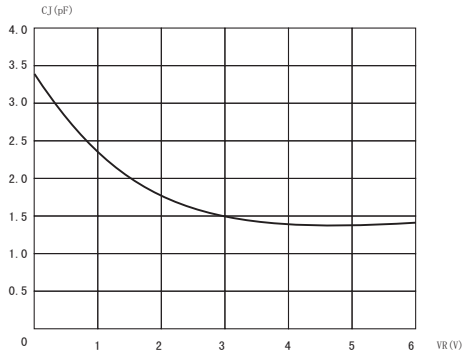
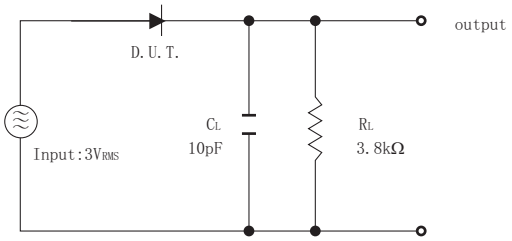


FIG.4-DETECTION EFFICIENCY MEASUREMENT CIRCUIT



RATINGS AND CHARACTERISTIC CURVES LL60 LL60P

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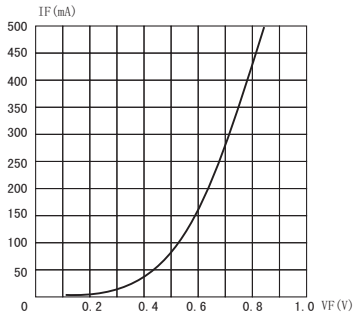

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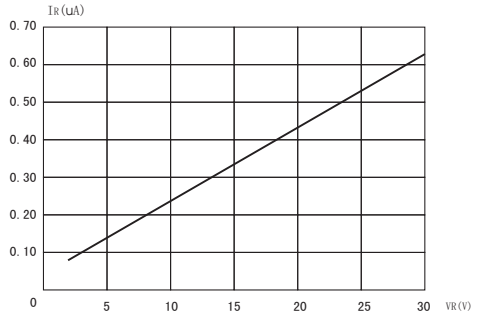

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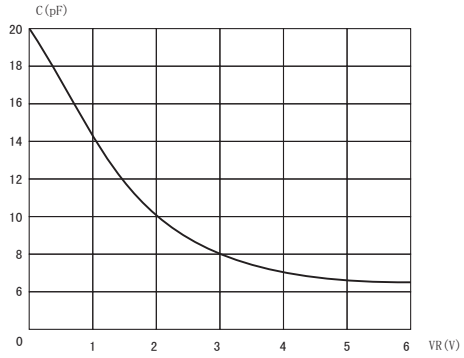

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