



SEMICONDUCTOR

LL60, LL60P

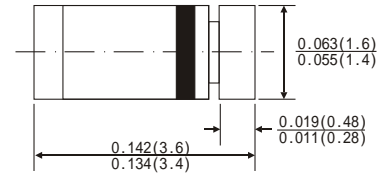
SMALL SIGNAL SCHOTTKY DIODES

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FEATURES

- Metal-on-silicon junction, majority carrier conduction
- High current capability, Low forward voltage drop
- Extremely low reverse current I_R
- Ultra speed switching characteristics
- Small temperature coefficient of forward characteristics
- Satisfactory Wave detection efficiency
- For use in RECORDER TV RADIO TELEPHONE as detectors,super high speed switching circuits, small current rectifier

Mini-MELF



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: MinMELF glass case (SOD- 80)
- Polarity: color band denotes cathode end
- Weight: Approx. 0.05gram

ABSOLUTE RATINGS(LIMITING VALUES)

Symbols	Parameters	Value		Units
		LL60	LL60P	
V_{RRM}	Repetitive Peak Reverse Voltage	20	30	Volts
I_F	Forward Continuous Current $T_A=25^{\circ}C$	30	50	mA
I_{FSM}	Peak Forward Surge Current($t=1S$)	150	400	mA
T_{STG}/T_J	Storage and junction Temperature Range	-65 to +125		$^{\circ}C$
T_L	Maximum Lead Temperature for Soldering during 10S at 4mm from Case	230		$^{\circ}C$

ELECTRICAL CHARACTERISTICS

Symbols	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_R	Reverse Current	$V_R=15V$	LL60	1.0	5.0	A
			LL60P	5.0	10.0	
		$V_R=10V$	LL60	4.0		
C_J	Junction Capacitance	$V_R=1V$ $f=1MHz$	LL60			pF
		$V_R=10V$ $f=1MHz$	LL60P	10.0		
	Detection Efficiency(See diagram 4)	$V_I=3V$ $f=30MHz$ $C_L=10pF$ $R_L=3.8k$		60		
t_{rr}	Reverse Recovery time	$I_F=I_R=1mA$ $I_{rr}=1mA$ $R_C=100$			1	ns
R JA	Junction Ambient Thermal Resistance	R JA		350		$^{\circ}C/W$

RATINGS AND CHARACTERISTIC CURVES LL60

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

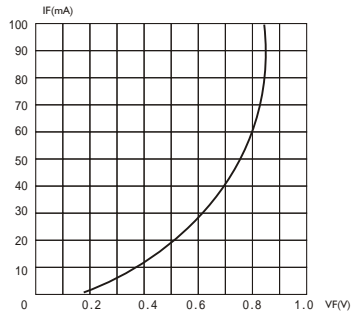


FIG.2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

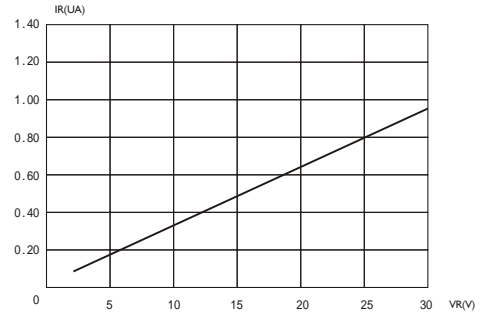


FIG.3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

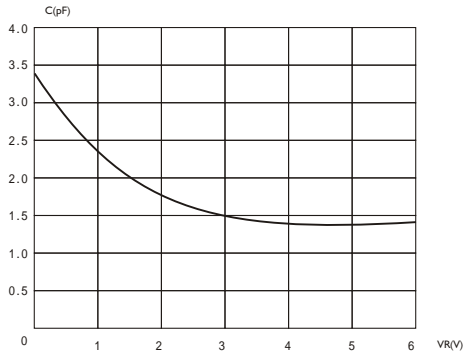
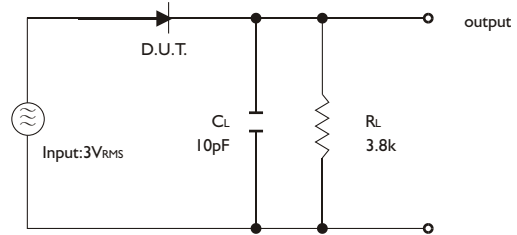


FIG.4-DETECTION EFFICIENCY MEASUREMENT CIRCUIT



RATINGS AND CHARACTERISTICS CURVES LL60P

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

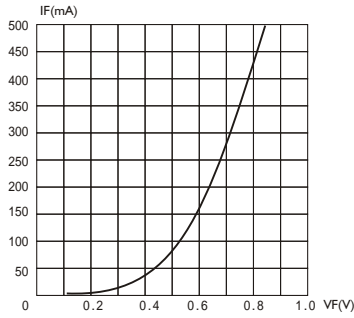


FIG.2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

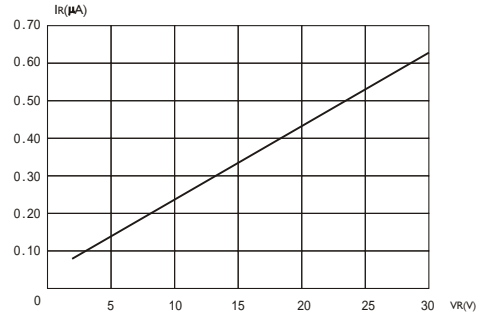


FIG.3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

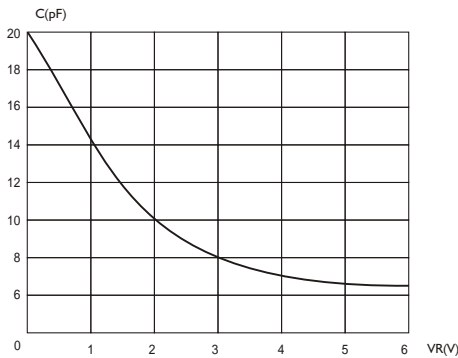


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