



SEMICONDUCTOR

LL60, LL60P
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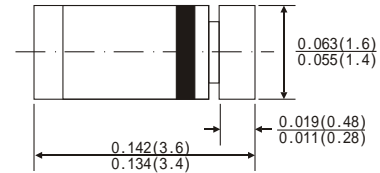
SMALL SIGNAL SCHOTTKY DIODES

SMALL SIGNAL
SCHOTTKY DIODES

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°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		°C
T _L	Maximum Lead Temperature for Soldering during 10S at 4mm from Case	230		°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	
C _J	Junction Capacitance	V _R =1V f=1MHz	LL60	4.0		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		°C/W

RATINGS AND CHARACTERISTIC CURVES LL60

SMALL SIGNAL
CHOTTKY DIODES

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

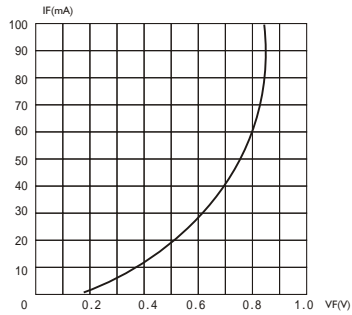


FIG.2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

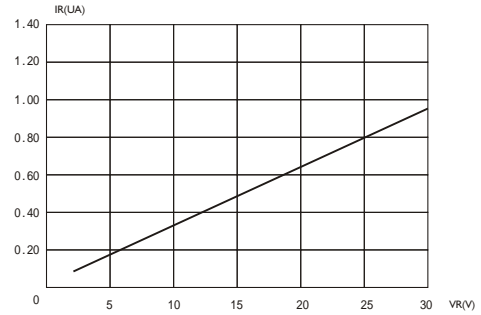


FIG.3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

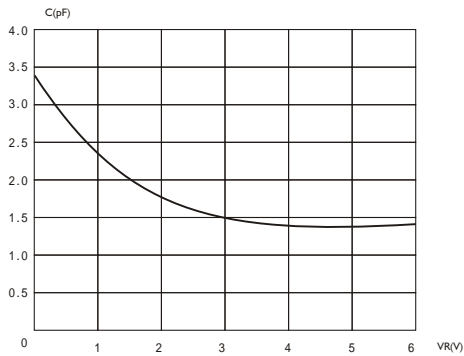
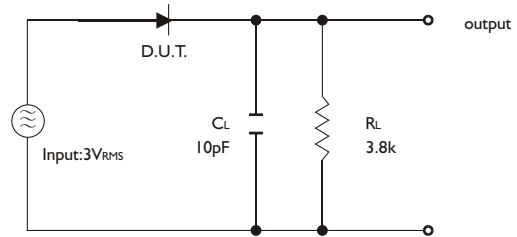


FIG.4-DETECTION EFFICIENCY MEASUREMENT CIRCUIT



RATINGS AND CHARACTERISTICS CURVES LL60P

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

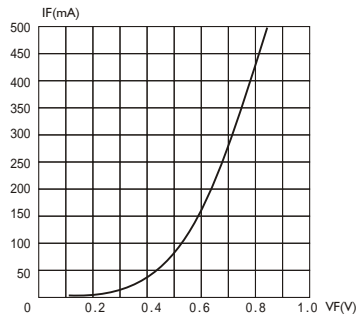


FIG.2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

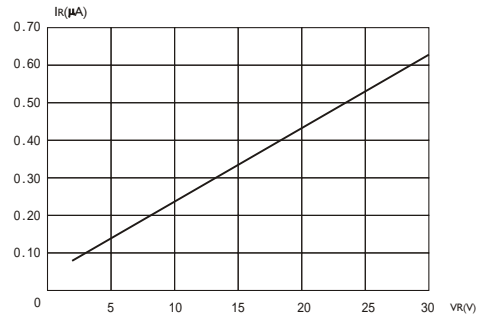


FIG.3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

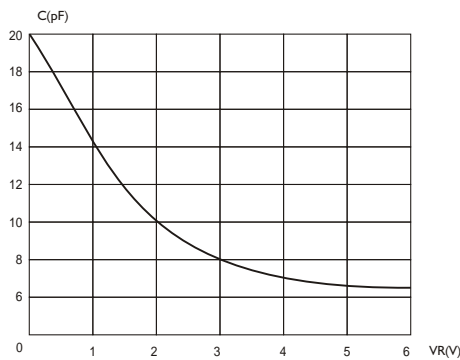


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