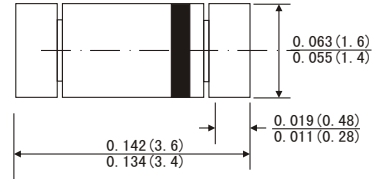




## FEATURES

- 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°C/10 seconds at terminals

## MiniMELF



## MECHANICAL DATA

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

Dimensions in inches and (millimeters)

## ABSOLUTE RATINGS(LIMITING VALUES)

Symbols	Parameters		Value		Units
			LL60	LL60P	
VRRM	Repetitive Peak Reverse Voltage		40	40	Volts
IF	Forward Continuous Current	T <sub>A</sub> =25°C	30	50	mA
IFSM	Peak Forward Surge Current(t=1s)		150	400	mA
TSTG/TJ	Storage and junction Temperature Range		-55 to+125		°C
TL	Maximum Lead Temperature for Soldering during 10s at 4mm from Case		260		°C

## ELECTRICAL CHARACTERISTICS

Symbols	Parameters	Test Conditions	Value			Units
			Min.	Typ.	Max.	
VF	Forward Voltage	I <sub>F</sub> =1mA	LL60	0.35	0.5	Volts
			LL60P	0.26	0.5	
		I <sub>F</sub> =30mA	LL60	0.70	1.0	
IR	Reverse Current	V <sub>R</sub> =15V	LL60	1.0	5.0	mA
			LL60P	5.0	10.0	
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> =1V f=1MHz	LL60	4.0		pF
		V <sub>R</sub> =10V f=1MHz	LL60P	10.0		
h	Detection Efficiency(See diagram 4)	V <sub>I</sub> =3V f=30MHz C <sub>L</sub> =10pF R <sub>L</sub> =3.8kΩ		60		%
t <sub>rr</sub>	Reverse Recovery time	I <sub>F</sub> =I <sub>R</sub> =1mA I <sub>rr</sub> =1mA R <sub>c</sub> =100Ω			1	ns
R <sub>θJA</sub>	Junction Ambient Thermal Resistance			400		°C/W

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

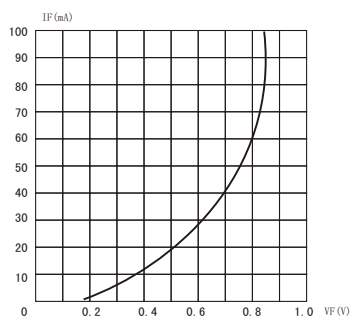


FIG.2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

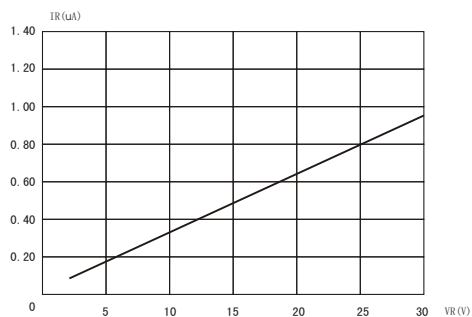


FIG.3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

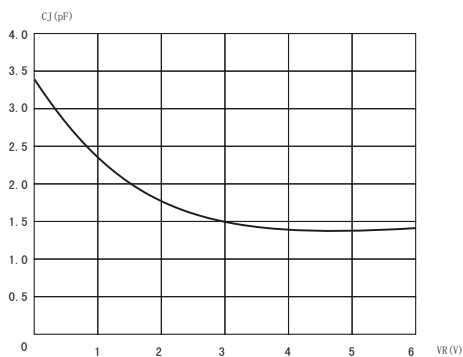


FIG.4-DETECTION EFFICIENCY MEASUREMENT CIRCUIT

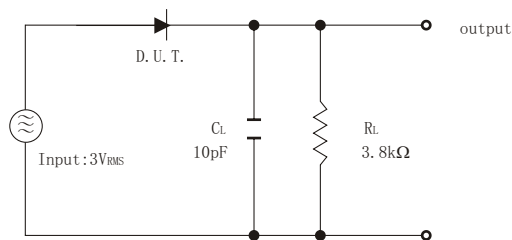




FIG.1-FORWARD CURRENT VERSUS FORWARD VOLTAGE (TYPICAL VALUES)

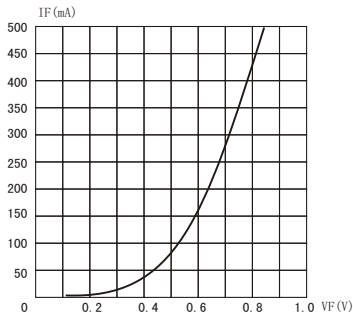


FIG.2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

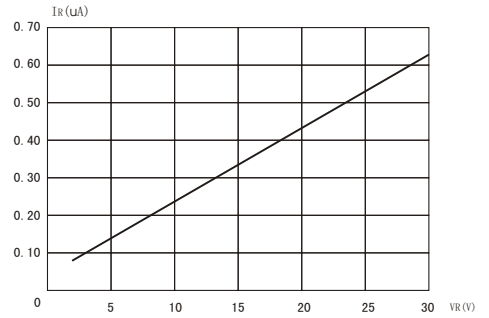


FIG.3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

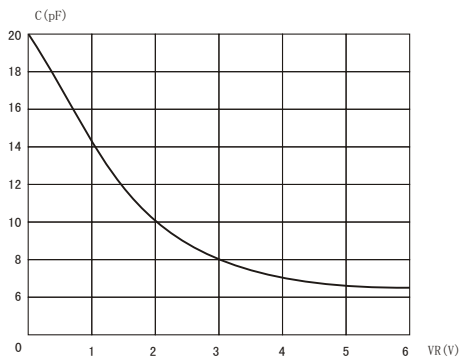


FIG.4-DETECTION EFFICIENCY MEASUREMENT CIRCUIT

