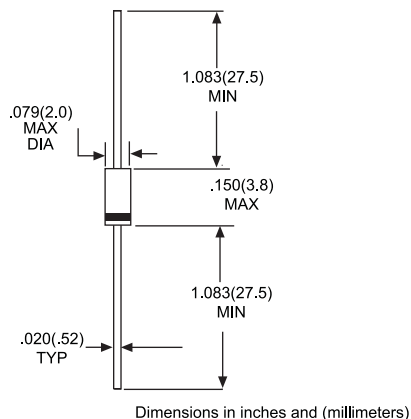


1N60, 1N60P

DO-35



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

Mechanical Data

- Case: DO-35 glass case
- Polarity: Color band denotes cathode end
- Weight: Approx. 0.13 gram

ABSOLUTE RATINGS(LIMITING VALUES)

Type Number		1N60	1N60P	UNITS
Repetitive Peak Reverse Voltage	V_{RRM}	20	30	Volts
Forward Continuous Current	I_F $T_A=25^\circ C$	30	50	mA
Peak Forward Surge Current($t=1S$)	I_{FSM}	150	400	mA
Storage and junction Temperature Range	T_{STG}/T_J	-65 to +125		$^\circ C$
Maximun Lead Temperature for Soldering during 10S at 4mm from Case	T_L	230		$^\circ C$

ELECTRICAL CHARACTERISTICS

Type Number		Test Conditions		Min.	Typ.	Max.	UNITS
Forward Voltage	V_F	$I_F=1mA$	1N60		0.35	0.5	Volts
			1N60P		0.26	0.5	
		$I_F=30mA$	1N60		0.70	1.0	
			1N60P		0.70	1.0	
Reverse Current	I_R	$V_R=15V$	1N60		1.0	5.0	μA
			1N60P		5.0	10.0	
Junction Capacitance	C_J	$V_R=1V$ $f=1MHz$	1N60		4.0		pF
			1N60P		10.0		
Detection Efficiency(See diagram 4)	η	$V_I=3V$ $f=30MHz$ $Q_c=10pF$ $R_c=3.8K\Omega$			60		%
Reverse Recovery time	T_{rr}	$I_F=I_R=1mA$ $I_{rr}=1mA$ $R_c=100\Omega$				1	ns
Junction Ambient Thermal Resistance	$R_{\theta JA}$				400		$^\circ C/W$

RATING AND CHARACTERISTIC CURVES 1N60,1N60P

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

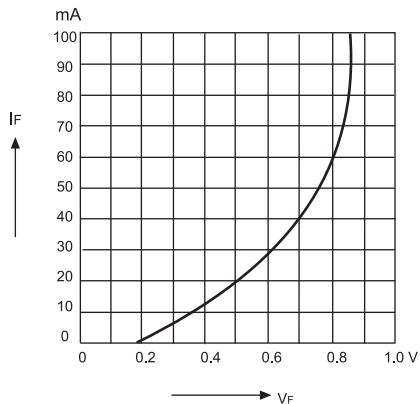


FIG.2 - REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

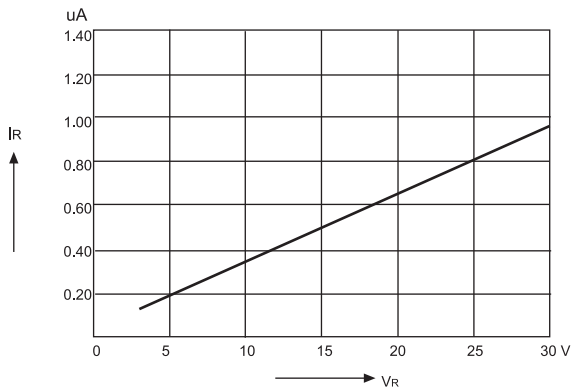


FIG.3 - JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

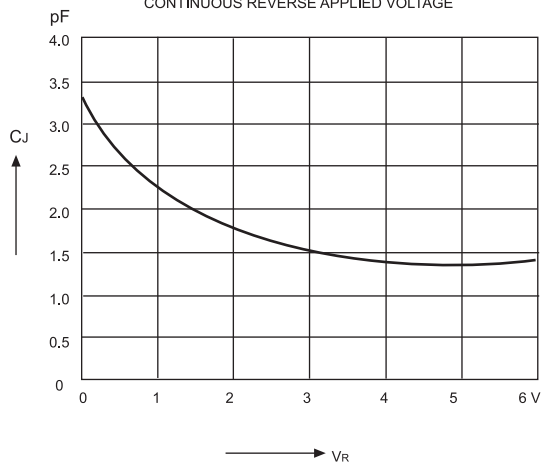


FIG.4 - DETECTION EFFICIENCY MEASUREMENT CIRCUIT

