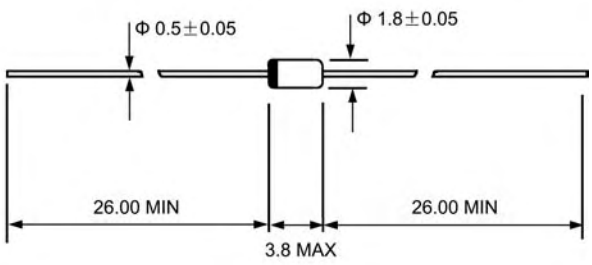
1N60

Small Signal Schottky Diodes

VOLTAGE RANGE: 40V
CURRENT: 0.03 A

DO - 35(GLASS)



Dimensions in millimeters

Features

- ◇ Metal sillicon 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:JEDEC DO--35,glass case
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: Approx. 0.13 gram

ABSOLUTE RATINGS(LIMITING VALUES)

Parameters		Symbols	Value	UNITS
			1N60	
Repetitive peak reverse voltage		V_{RRM}	40.0	V
Forward continuous current	T_A=25℃	I_F	30.0	mA
Peak forward surge current (t=ls)		I_{FSM}	150.0	mA
Storage and junction temperature range		T_{STG}/T_J	- 55 ---- + 150	℃
Maximum lead temperature for soldering during 10s at 4mm from case		T_L	230	℃

ELECTRICAL CHARACTERISTICS

Parameters	Symbols	Test Conditions		Value			UNITS
				Min.	Typ.	Max.	
Forward voltage	V_F	I_F=1mA	1N60		0.32	0.5	V
		I_F=30mA	1N60		0.65	1.0	
Reverse current	I_R	V_R=15V	1N60		0.1	0.5	μA
Junction capacitance	C_J	V_R=1V f=1MHz	1N60		2		pF
Detection efficiency (See FIG. 4)	η	V_I=3V f=30MHz C_L=10pF R_L=3.8KΩ			60.0		%
Reverse recovery time	t_{rr}	I_F=I_R=10mA t_{rr}=1mA ,R_L=100Ω				1	ns
Thermal resistance,junction to ambient	$R_{\theta JA}$				400		℃/W

Ratings AND Charactieristic Curves

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

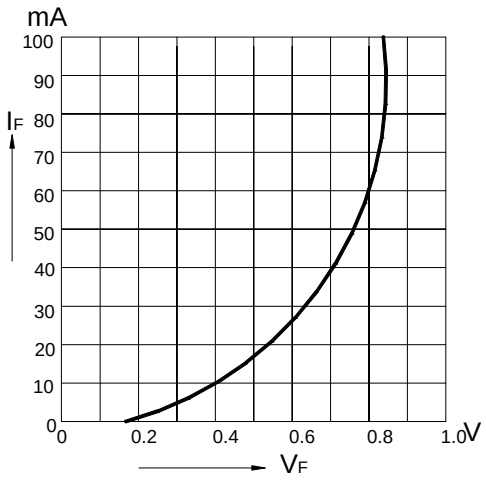


FIG.2 -- REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

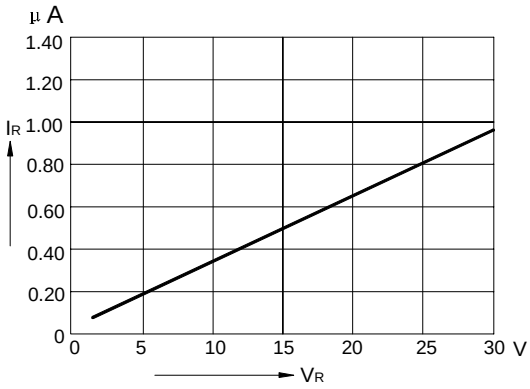


FIG.3 -- JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

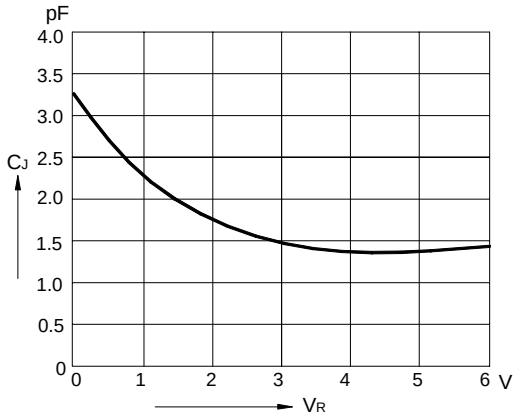


FIG.4 -- DETECTION EFFICIENCY MEASUREMENT CIRCUIT