1N60

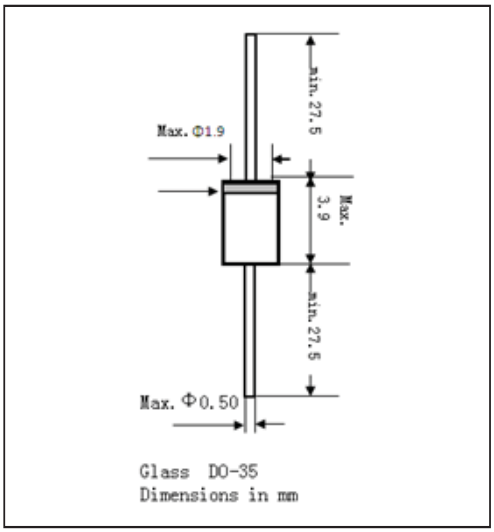
Schottky Barrier Diode

Features

- Use in super high speed switching circuits, small current rectifier

MECHANICAL DATA

- Case: DO-35
- Polarity: Color band denotes cathode end
- Mounting Position: Any



ABSOLUTE RATINGS(LIMITING VALUES)

Parameters		Symbols	Value	UNITS
			1N60	
Repetitive peak reverse voltage		V_{RRM}	40.0	V
Forw ard continuous current	T_A=25℃	I_F	30.0	mA
Peak forw ard 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 CHARACTERISTIC CURVES

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

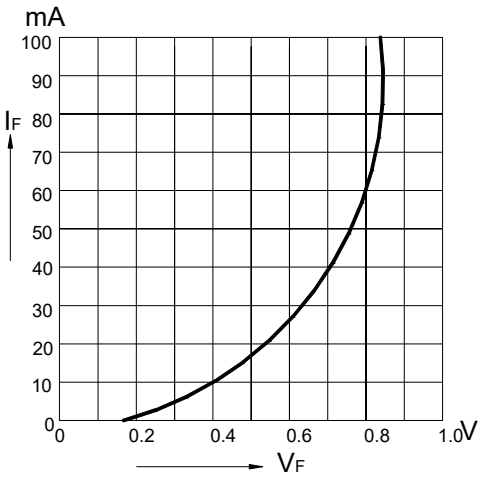


FIG.2 – REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

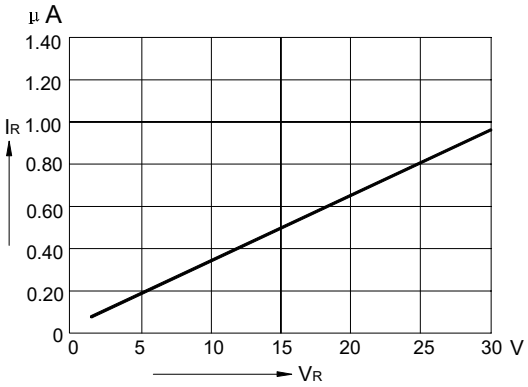


FIG.3 – JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

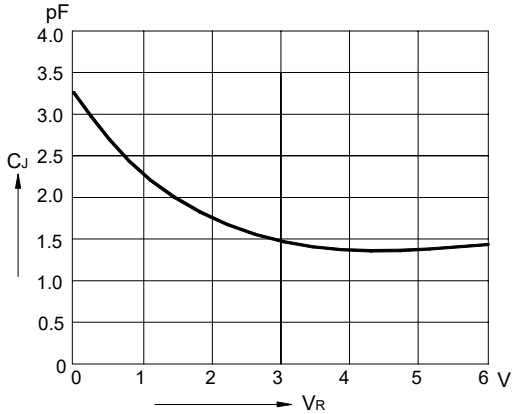


FIG.4 – DETECTION EFFICIENCY MEASUREMENT CIRCUIT