

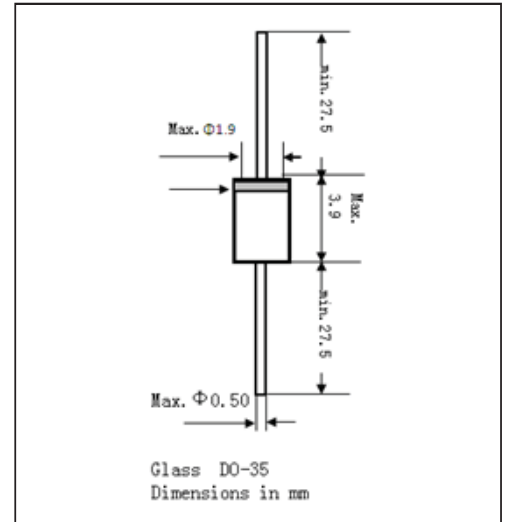
Schottky Barrier Diode

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
		1N60P	
Repetitive peak reverse voltage	V_{RRM}	45	V
Forward continuous current	I_F	50	mA
Peak forward surge current (t=1s)	I_{FSM}	500	mA
Storage and junction temperature range	T_{STG}/T_J	- 55 ---- + 125	°C
Maximum lead temperature for soldering during 10s at 4mm from case	T_L	230	°C

ELECTRICAL CHARACTERISTICS

Parameters	Symbols	Test Conditions	Value			UNITS
			Min.	Typ.	Max.	
Forward voltage	V_F	$I_F=1mA$		0.24	0.5	V
		$I_F=200mA$		0.65	1.0	
Reverse current	I_R	$V_R=15V$		0.5	1.0	μ A
Junction capacitance	C_J	$V_R=10V f=1MHz$		6.0		pF
Detection efficiency (See FIG. 4)	η	$V_I=3V f=30MHz$ $C_L=10pF R_L=3.8K\Omega$		60.0		%
Reverse recovery time	t_{rr}	$I_F=I_R=1mA I_{rr}=1mA R_C=100\Omega$			1.0	ns
Thermal resistance junction to ambient	$R_{\theta JA}$			400		°C/W

RATINGS AND CHARACTERISTIC CURVES

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

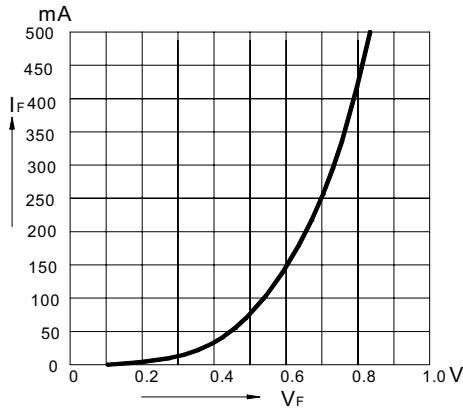


FIG.2 – REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

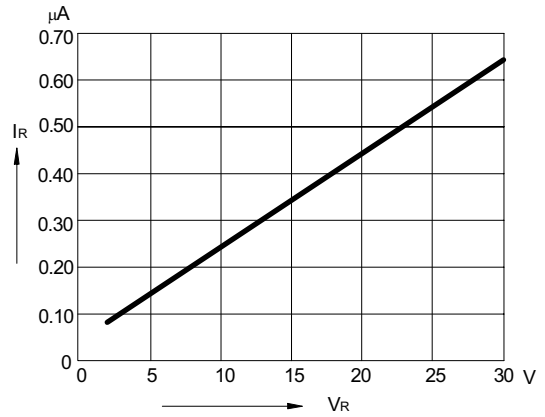


FIG.3 – JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

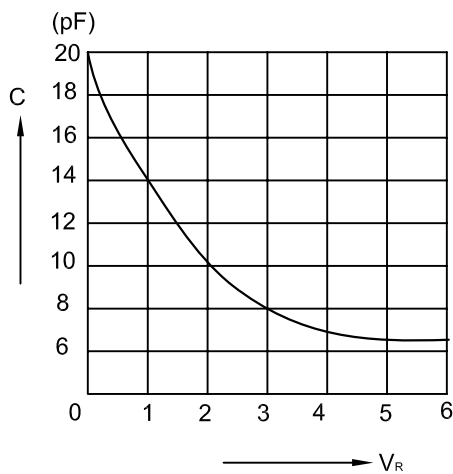


FIG.4 – DETECTION EFFICIENCY MEASUREMENT CIRCUIT

