

1N60P

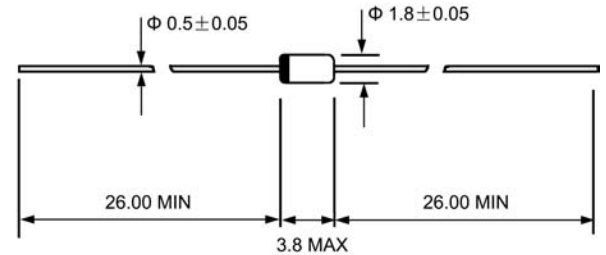
Small Signal Schottky Diodes



VOLTAGE RANGE: 45 V

CURRENT: 0.1 A

DO - 35(GLASS)



Dimensions in millimeters

Features

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

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	μA
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)

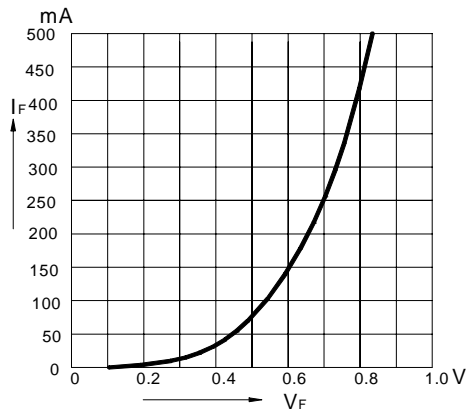


FIG.2 – REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

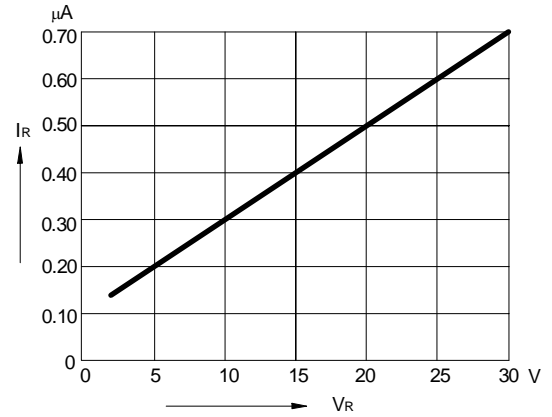


FIG.3 – JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

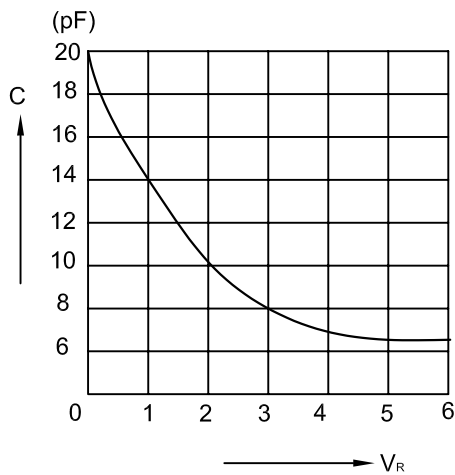


FIG.4 – DETECTION EFFICIENCY MEASUREMENT CIRCUIT

