

1N60, 1N60P

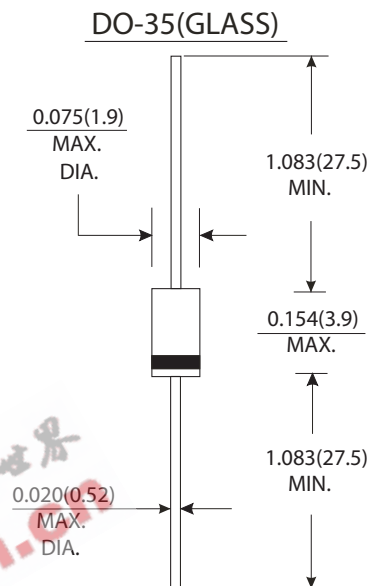
GERMANIUM DIODES

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



Dimensions in inches and (millimeters)

Absolute Ratings (Limiting Values)

Symbols	Parameters		Value		Units
			1N60	1N60P	
VRRM	Zenerepetitive Peak Reverse Voltage		40	45	Volts
IF	Forward Continuous Crrnt	TA=25 °C	30	50	mA
IFSM	Peak Forward Surge Current(t=1S)		150	500	mA
TSTG/TJ	Storage junction Temperature Range		-65 to+125		°C
TL	Maximum Lead Temperature for soldering 10S at 4mm from Case		230		°C

Electrical characteristics

Symbols	Parameters	Test Conditions	Value			Units
			Min	Typ.	Max.	
VF	Forward Voltage	IF=1mA	1N60	0.32	0.5	Volts
			1N60P	0.24	0.5	
		IF=30mA	1N60	0.65	1.0	
			1N60P	0.65	1.0	
IR	Reverse Current	VR=15V	1N60	0.1	0.5	μA
			1N60P	0.5	1.0	
CJ	Junction Capacitance	VR=1V f=1MHz	1N60	2.0		pF
		VR=10V f=1MHz	1N60P	6.0		
η	Detection Efficienc(See diagram 4)	VI=3V f=30MHz CL=10pF RL=3.8kΩ		60		%
trr	Revese Recovery time	IF=IR=1mA Irr=1mA RC=100Ω			1	ns
RθJA	Junction Amblent Thermal Resistance			400		°C/W

RATINGS AND CHARACTERISTIC CURVES 1N60P

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

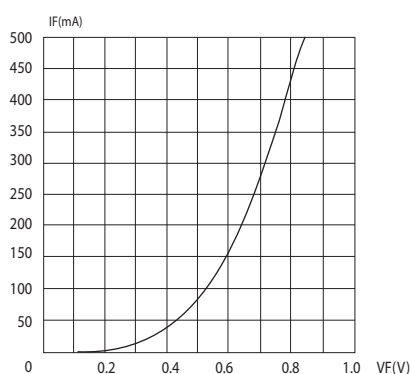


FIG.2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

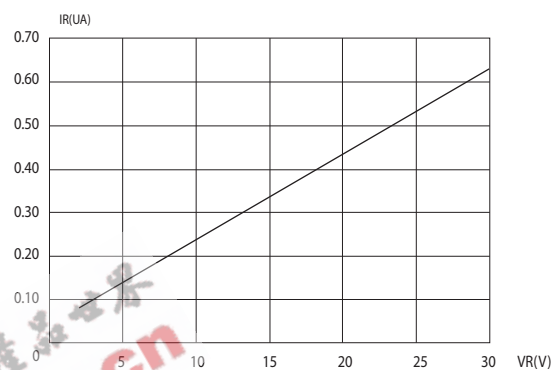


FIG.3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

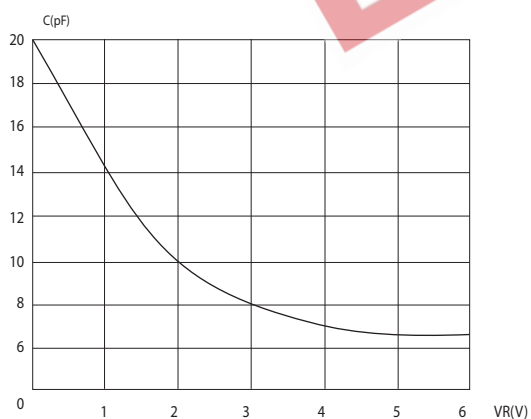


FIG.4-DETECTION EFFICIENCY MEASUREMENT CIRCUIT

