



1N60 THRU 1N60P

SMALL SIGNAL SCHOTTKY DIODE

Reverse Voltage - 40 to 45 Volts Forward Current - 0.03 / 0.05 Ampere

FEATURES

- Metal-on-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

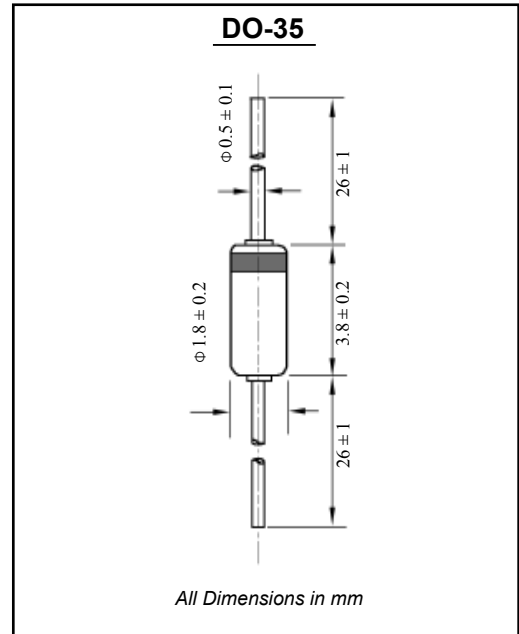
MECHANICAL DATA

Case: DO-35 glass case

Polarity : Color band denotes cathode end

Mounting Position : Any

Weight : 0.13 grams



ABSOLUTE RATINGS(LIMITING VALUES)

Symbol	Parameters	Value		Units
		1N60	1N60P	
V_{RRM}	Repetitive Peak Reverse Voltage	40	45	Volts
I_F	Forward Continuous Current	30	50	mA
I_{FSM}	Peak Forward Surge Current($t=1S$)	150	400	mA
T_{STG}/T_J	Storage and junction Temperature Range	-65 to +125		$^{\circ}C$
T_L	Maximum Lead Temperature for Soldering during 10S at 4mm from Case	230		$^{\circ}C$

ELECTRICAL CHARACTERISTICS

Symbol	Parameters	Test Conditions	Value			Units
			Min.	Typ.	Max.	
V_F	Forward Voltage	$I_F=1mA$	1N60	0.32	0.5	Volts
			1N60P	0.24	0.5	
		$I_F=200mA$	1N60	0.65	1.0	
I_R	Reverse Current	$V_R=15V$	1N60	1.0	5.0	μA
			1N60P	5.0	10.0	
C_J	Junction Capacitance	$V_R=1V$ $f=1MHz$	1N60	2.0		pF
		$V_R=10V$ $f=1MHz$	1N60P	6.0		
η	Detection Efficiency(See diagram 4)	$V_i=3V$ $f=30MHz$ $C_L=10pF$ $R_L=3.8k \Omega$		60		%
t_{rr}	Reverse Recovery time	$I_F=I_R=1mA$ $I_{rr}=1mA$ $R_C=100 \Omega$			1	ns
$R_{\theta JA}$	Junction Ambient Thermal Resistance			400		$^{\circ}C/W$

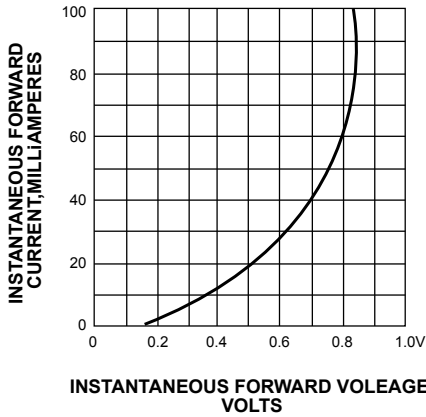


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RATINGS AND CHARACTERISTIC CURVES

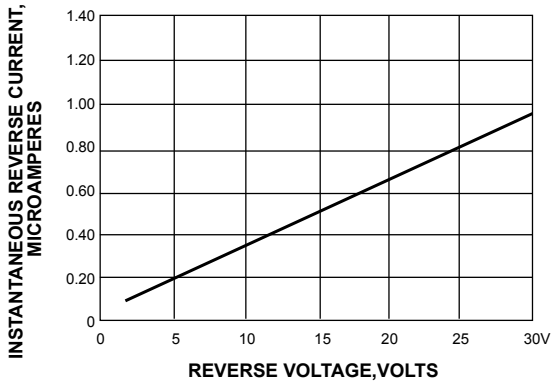
1N60

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



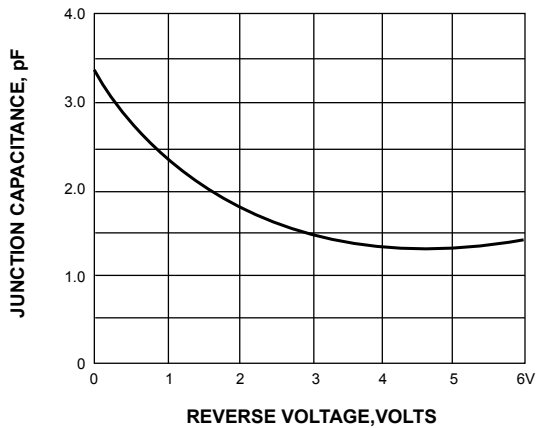
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG. 2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE



REVERSE VOLTAGE, VOLTS

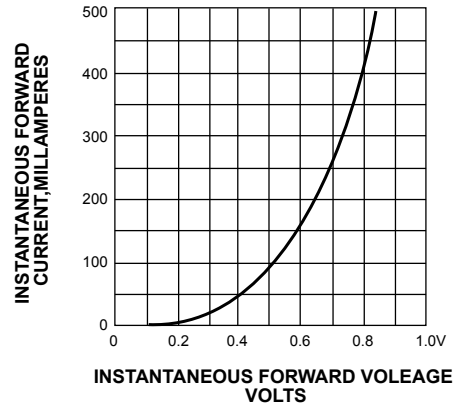
FIG. 3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE



REVERSE VOLTAGE, VOLTS

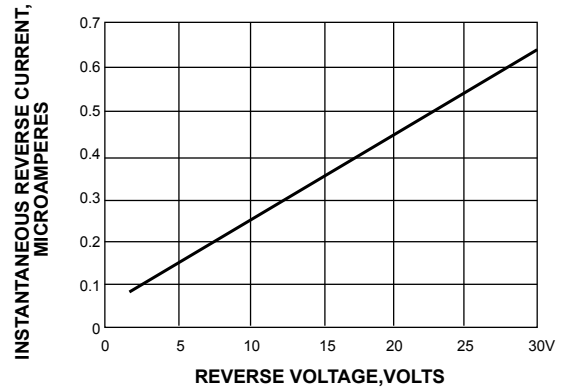
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FIG. 1-FORWARD CURRENT VERSUS FORWARD VOLTAGE (TYPICAL VALUES)



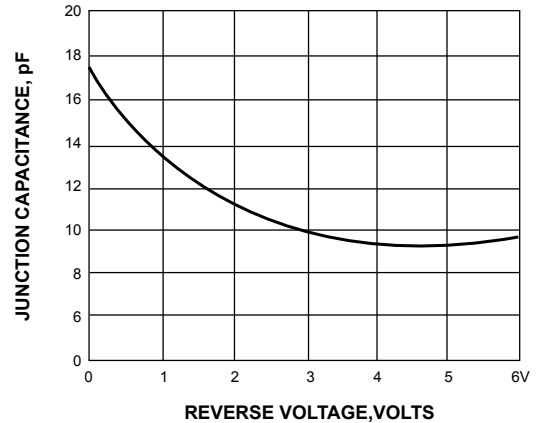
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG. 2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE



REVERSE VOLTAGE, VOLTS

FIG. 3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE



REVERSE VOLTAGE, VOLTS