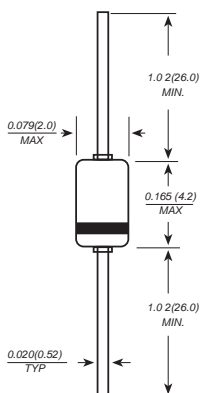


1N60 THRU 1N60P

SMALL SIGNAL SCHOTTKY DIODES

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

DO-35(GLASS)



Dimensions in inches and (millimeters)

FEATURES

- ◆ Fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: DO-35 glass case

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.005 ounce, 0.14 grams

ABSOLUTE RATINGS

Parameters	SYMBOLS	Value		UNITS
		1N60	1N60P	
Repetitive peak reverse voltage	V_{RRM}	40	45	V
Forward continuous current $T_A=25^\circ\text{C}$	I_F	30	50	mA
Peak forward surge current ($t=1\text{s}$)	I_{FSM}	150	500	mA
Storage and junction temperature range	T_J, T_{STG}	-65 to +125		$^\circ\text{C}$
Maximum lead temperature for soldering during 10s at 4mm from case	T_L	230		$^\circ\text{C}$

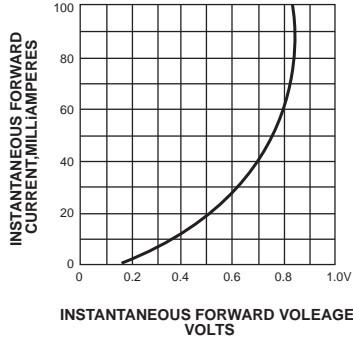
ELECTRICAL CHARACTERISTICS

Parameters	SYMBOLS	Test conditions	Value			UNITS
			Min.	Typ.	Max.	
Forward voltage	V_F	$I_F=1\text{mA}$	1N60	0.32	0.5	V
			1N60P	0.24	0.5	
		$I_F=30\text{mA}$	1N60	0.65	1.0	
			1N60P	0.65	1.0	
Reverse current	I_R	$V_R=15\text{V}$	1N60	0.1	0.5	μA
			1N60P	0.5	1.0	
Junction capacitance	C_J	$V_R=1\text{V}$ $f=1\text{MHz}$	1N60	2.0		pF
		$V_R=10\text{V}$ $f=1\text{MHz}$	1N60P	6.0		
Detection efficiency	η	$V_i=3\text{V}$ $f=30\text{MHz}$ $C_L=10\text{pF}$ $R_L=3.8\text{k}\Omega$		60		%
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}$ $I_{rr}=1\text{mA}$ $R_C=100\Omega$			1	ns
Thermal resistance, junction to ambient	R_{qJA}			400		$^\circ\text{C/W}$

RATINGS AND CHARACTERISTIC CURVES 1N60 THRU 1N60P

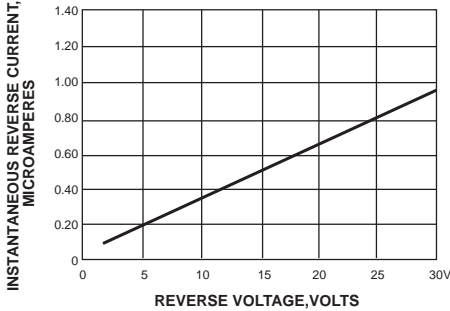
1N60

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



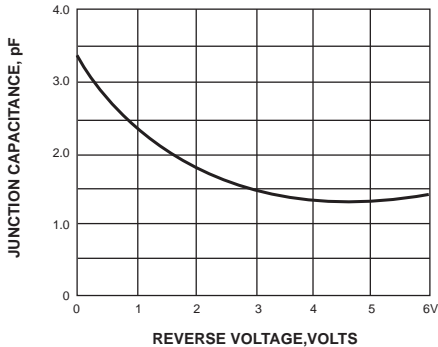
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG. 2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE



REVERSE VOLTAGE, VOLTS

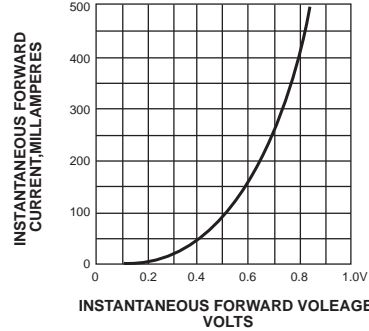
FIG. 3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE



REVERSE VOLTAGE, VOLTS

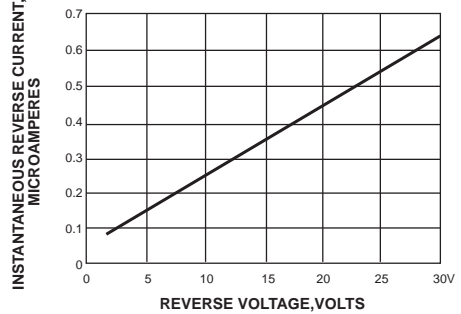
1N60P

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



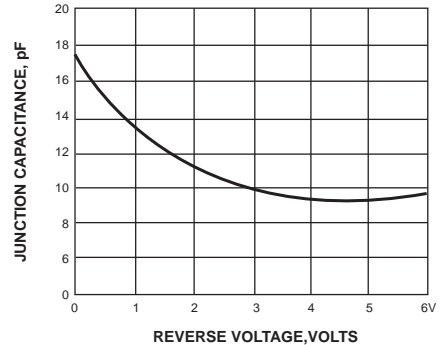
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG. 2-REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE



REVERSE VOLTAGE, VOLTS

FIG. 3-JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE



REVERSE VOLTAGE, VOLTS