



*DC COMPONENTS CO., LTD.*

RECTIFIER SPECIALISTS

1N60P

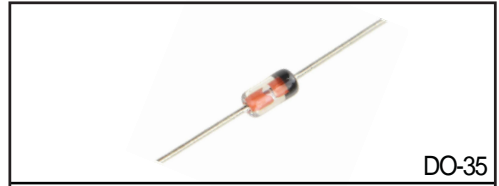
**TECHNICAL SPECIFICATIONS OF SMALL SINGAL SCHOTTKY DIODES**

**FEATURES**

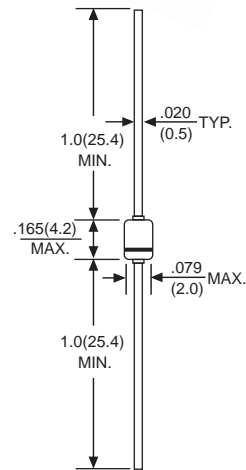
- \* Metal silicon junction, majority carrier conduction.
- \* High current capability, low forward voltage drop.
- \* Extremely low reverse current  $I_r$
- \* Ultra speed switching characteristics
- \* Small temperature coefficient of forward characteristics
- \* Satisfactory Wave detection efficiency
- \* 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:** 0.13 grams approx.



DO-35



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

**ABSOLUTE RATINGS(LIMITING VALUES)**

PARAMETERS		SYMBOL	VALUE	UNITS
Repetitive Peak Reverse Voltage		$V_{RRM}$	40	Volts
Forward Continuous Current	$T_A=25^\circ C$	$I_F$	50	mA
Peak Forward Surge Current( $t=1S$ )		$I_{FSM}$	400	mA
Storage and junction Temperature Range		$T_{STG}/T_J$	-55 to +125	°C
Maximum Lead Temperature for Soldering during 10S at 4mm from Case		$T_L$	230	°C

**ELECTRICAL CHARACTERISTICS**

PARAMETERS	TEST CONDITIONS	SYMBOL	VALUE		UNITS
			TYP.	MAX.	
Forward Voltage	$I_F=1mA$	$V_F$	0.26	0.5	Volts
	$I_F=200mA$		0.70	1.0	
Reverse Current	$V_R=15V$	$I_R$	5.0	10	µA
Junction Capacitance	$V_R=10V$ $f=1MHz$	$C_J$	10		pF
Detection Efficiency	$V_I=3V$ $f=30MHz$ $C_L=10pF$ $R_L=3.8K\Omega$	$\eta$	60		%
Reverse Recovey time	$I_F=I_R=1mA$ $I_{rr}=1mA$ $R_C=100\Omega$	$t_{rr}$		1	ns
Junction Ambient Thermal Resistance		$R_{\theta JA}$	400		°C/W

# RATING AND CHARACTERISTIC CURVES (1N60P)

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

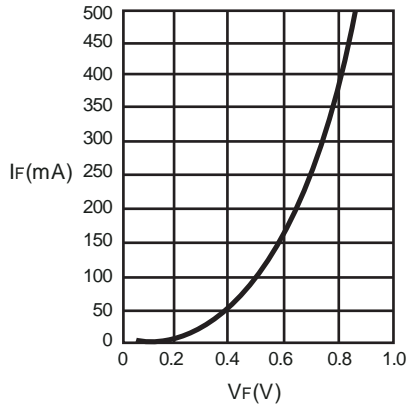


FIG.2  
REVERSE CURRENT VERSUS  
CONTINUOUS REVERSE VOLTAGE

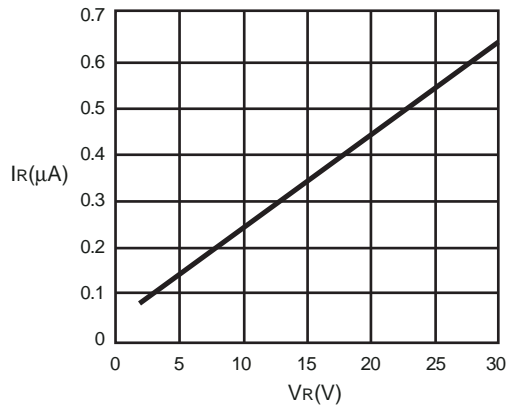


FIG.3  
JUNCTION CAPACITANCE VERSUS  
CONTINUOUS REVERSE APPLIED VOLTAGE

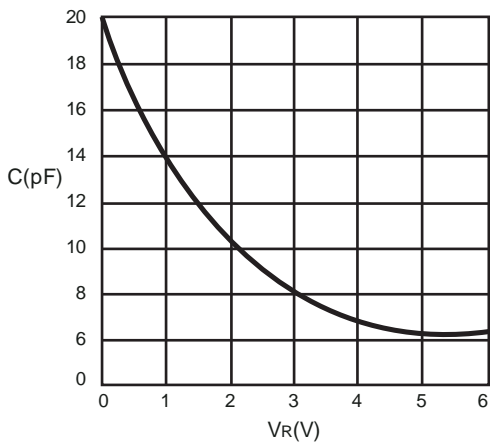
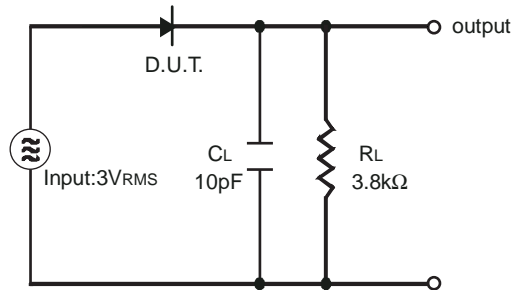


FIG.4  
DETECTION EFFICIENCY  
MEASUREMENT CIRCUIT



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