



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

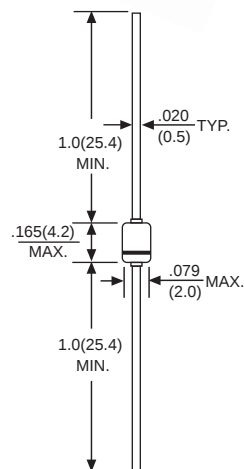
- * Case: DO-35 glass case
- * Polarity: color band denotes cathode end
- * Weight: 0.13 grams approx.

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%.



DO-35



Dimensions in inches and (millimeters)

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	$^{\circ}C$
Maximum Lead Temperature for Soldering during 10S at 4mm from Case		T_L	230	$^{\circ}C$

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	$V_I=3V$ $f=30MHz$ $C_L=10pF$ $R_L=3.8K\Omega$	η	60		%
Reverse Recovey time	$I_F=1mA$ $I_{rr}=1mA$ $R_c=100\Omega$	t_{rr}		1	ns
Junction Ambient Thermal Resistance		$R_{\theta JA}$	400		$^{\circ}C/W$

RATING AND CHARACTERISTIC CURVES (1N60P)

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

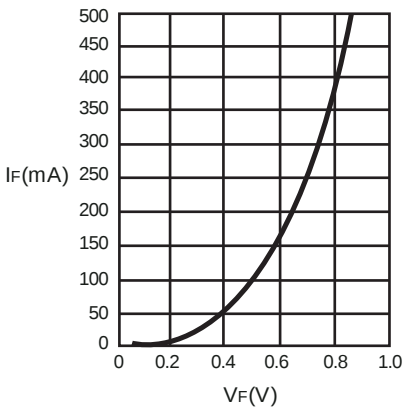


FIG.2
REVERSE CURRENT VERSUS
CONTINUOUS REVERSE VOLTAGE

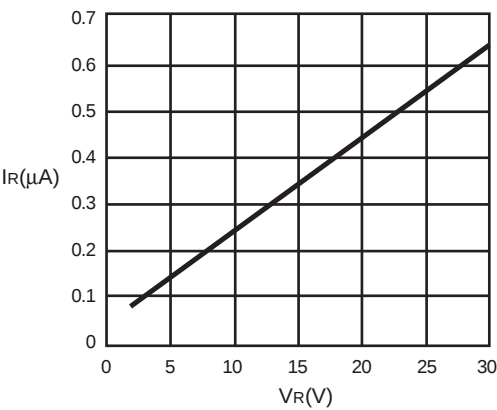


FIG.3
JUNCTION CAPACITANCE VERSUS
CONTINUOUS REVERSE APPLIED VOLTAGE

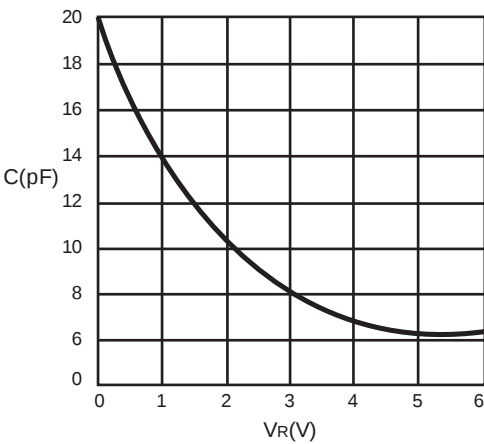
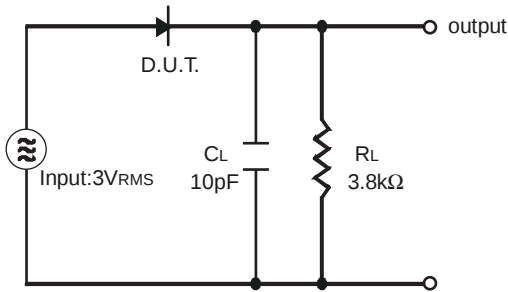


FIG.4
DETECTION EFFICIENCY
MEASUREMENT CIRCUIT



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