DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

1N60P

TECHNICAL SPECIFICATIONS OF SMALL SIGNAL 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

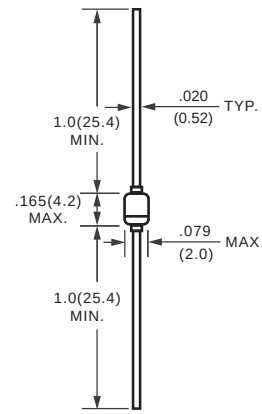
MECHANICAL DATA

* *Case*: DO-35 glass case
* *Polarity*: color band denotes cathode end
* *Weight*: 0.1178 grams approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, 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}	30	Volts
Forward Continuous Current	T_A=25°C	I_F	50	mA
Peak Forward Surge Current(t=1S)		I_{FSM}	400	mA
Storage and junction Temperature Range		T_{STG}/T_J	-65 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=3.8KΩ	η	60		%
Reverse Recovey time	I_F=I_R=1mA I_{rr}=1mA R_C=100Ω	t_{rr}		1	ns
Junction Ambient Thermal Resistance		RθJA	400		°C/W

RATING AND CHARACTERISTIC CURVES (1N60P)

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

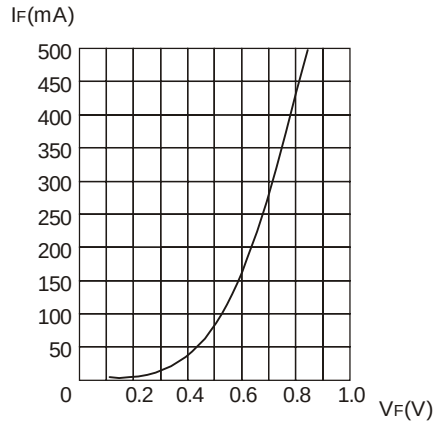


FIG. 2 - REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

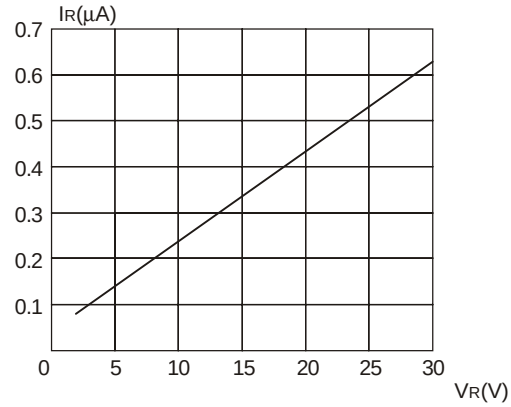


FIG. 3 - JUNCTION CAPACITANCE VERSUS CONTINUOUS REVERSE APPLIED VOLTAGE

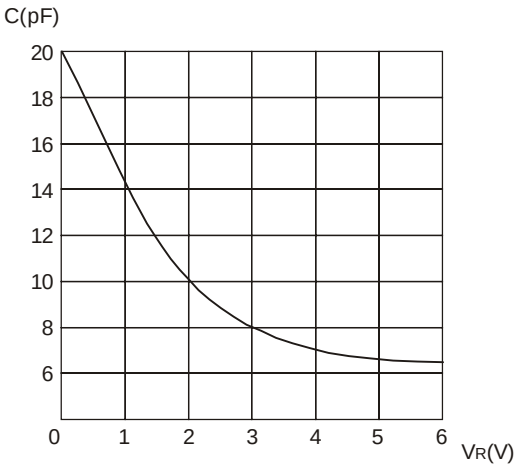


FIG. 4 - DETECTION EFFICIENCY MEASUREMENT CIRCUIT