



# DC COMPONENTS CO., LTD.

## RECTIFIER SPECIALISTS

1N60

### TECHNICAL SPECIFICATIONS OF SMALL SIGNAL SCHOTTKY DIODES

#### FEATURES

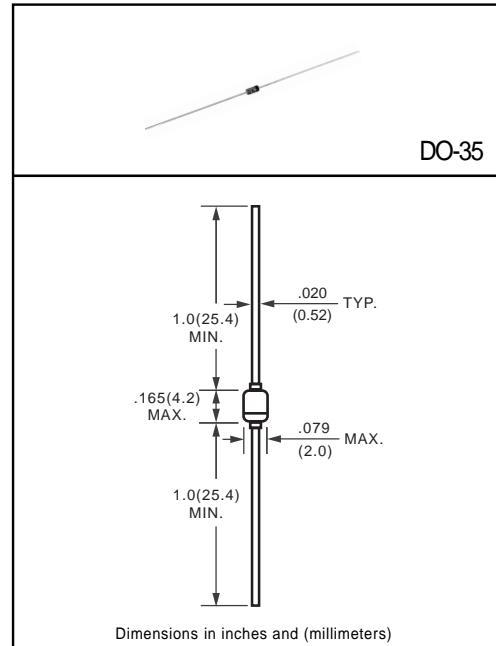
- \* Metal silicon junction, majority carrier conduction.
- \* High current capability, low forward voltage drop.
- \* Extremely low reverse current  $I_R$
- \* Ultra speed switching characteristics
- \* Small temperature coefficient of forward characteristics
- \* Satisfactory Wave detection efficiency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



Dimensions in inches and (millimeters)

#### ABSOLUTE RATINGS(LIMITING VALUES)

PARAMETERS		SYMBOL	VALUE		UNITS
ZeneRepetitive Peak Reverse Voltage		$V_{RRM}$	40		Volts
Forward Continuous Current	$T_A=25^\circ C$	$I_F$	30		mA
Peak Forward Surge Current( $t=1S$ )		$I_{FSM}$	150		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	$I=1\text{mA}$	$V_F$	0.32	0.5	Volts
	$I=200\text{mA}$		0.65	1.0	
Reverse Current	$V_R=15\text{V}$	$I_R$	0.1	0.5	μA
Junction Capacitance	$V_R=10\text{V}$ $f=1\text{MHz}$	$C_J$	2.0		pF
Detection Efficiency	$V_I=3\text{V}$ $f=30\text{MHz}$ $C_L=10\text{pF}$ $R_L=3.8\text{k}\Omega$	$\eta$	60		%
Reverse Recovery time	$I_F=I_R=1\text{mA}$ $I_{rr}=1\text{mA}$ $R_C=100\Omega$	$t_{rr}$		1	ns
Junction Ambient Thermal Resistance		$R_{QJA}$	400		°C/W