

# Central<sup>TM</sup> Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CDSH270

SCHOTTKY DIODE

JEDEC DO-35 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR CDSH270 is a Silicon Schottky diode specially designed to replace Germanium diodes manufactured with 1950's technology like the 1N270, 1N277, etc. with 1990's technology. Some advantages of this new technology are lower forward voltage, lower leakage, faster switching speed, and a more robust package.

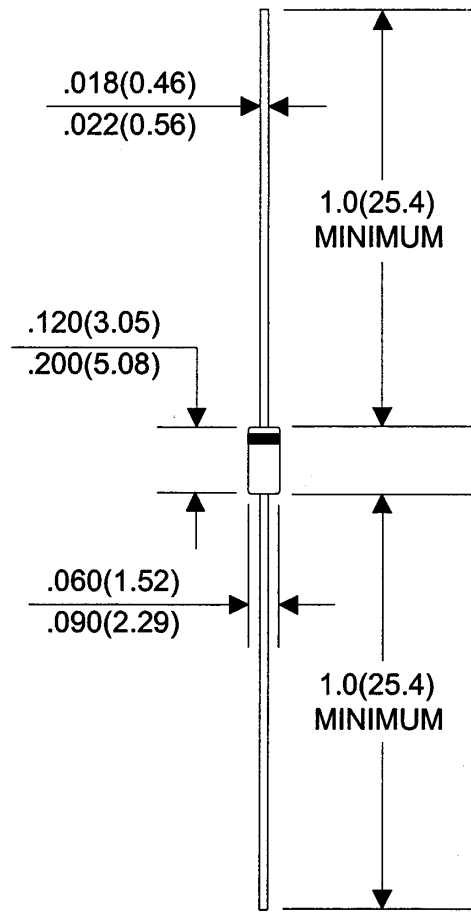
## MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

	<u>SYMBOL</u>		<u>UNITS</u>
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Continuous Forward Current	$I_F$	100	mA
Peak Forward Current (Repetitive, $t \leq 1\text{s}$ , $\delta \leq 0.5\text{s}$ )	$I_{FRM}$	350	mA
Peak Forward Surge Current (Non-Repetitive, $t=10\text{ms}$ )	$I_{FSM}$	750	mA
Power Dissipation	$P_D$	100	mW
Junction Temperature	$T_J$	-65 to +125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	300	$^\circ\text{C/W}$

## ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
$I_R$	$V_R=50\text{V}$			100	nA
$I_R$	$V_R=50\text{V}$ , $T_A=100^\circ\text{C}$			20	$\mu\text{A}$
$V_F$	$I_F=1.0\text{mA}$			0.45	V
$V_F$	$I_F=100\text{mA}$		0.9		V
$V_F$	$I_F=200\text{mA}$			1.0	V
$C_J$	$V_R=10\text{V}$ , $f=1.0\text{MHz}$		1.2		pF

# JEDEC DO-35 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).