

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

145 Adams Avenue, Hauppauge, NY 11788 USA  
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

## CRSH1 SERIES

SCHOTTKY BARRIER RECTIFIER  
1.0 AMPS, 20 THRU 60 VOLTS

JEDEC DO-41 CASE

### DESCRIPTION

The CENTRAL SEMICONDUCTOR CRSH1 Series types are Schottky Barrier Rectifiers mounted in an axial lead epoxy case using metal to silicon junction to yield low forward voltage drop and instantaneous reverse recovery times.

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

	<u>SYMBOL</u>	<u>CRSH1</u> <u>-2</u>	<u>CRSH1</u> <u>-3</u>	<u>CRSH1</u> <u>-4</u>	<u>CRSH1</u> <u>-5</u>	<u>CRSH1</u> <u>-6</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	30	40	50	60	V
DC Blocking Voltage	$V_R$	20	30	40	50	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	V
Average Forward Current( $T_L = 75^\circ\text{C}$ )	$I_O$	1.0	1.0	1.0	-	-	A
Average Forward Current( $T_L = 100^\circ\text{C}$ )	$I_O$	-	-	-	1.0	1.0	A
Peak Forward Surge Current(8.3ms)	$I_{FSM}$			50			A
Junction Temperature	$T_J$		-65 to +125				$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-65 to +150				$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$			15			$^\circ\text{C/W}$

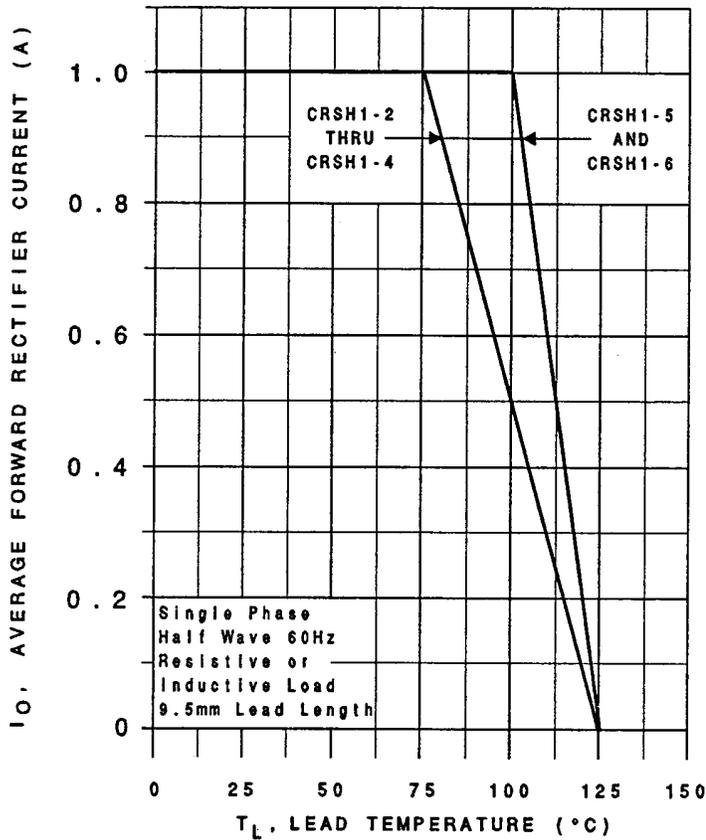
### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
$I_R$	$V_R = \text{Rated } V_{RRM}$			1.0	mA
$I_{R_s}$	$V_R = \text{Rated } V_{RRM}, T_A = 100^\circ\text{C}$			10	mA
$V_F$	$I_F = 1.0\text{A (20V THRU 40V)}$			0.5	V
$V_F$	$I_F = 1.0\text{A (50V AND 60V)}$			0.7	V
$C_J$	$V_F = 4.0\text{V}, f = 1.0\text{MHz (20V THRU 50V)}$		110		pF
$C_J$	$V_F = 4.0\text{V}, f = 1.0\text{MHz (60V)}$		80		pF

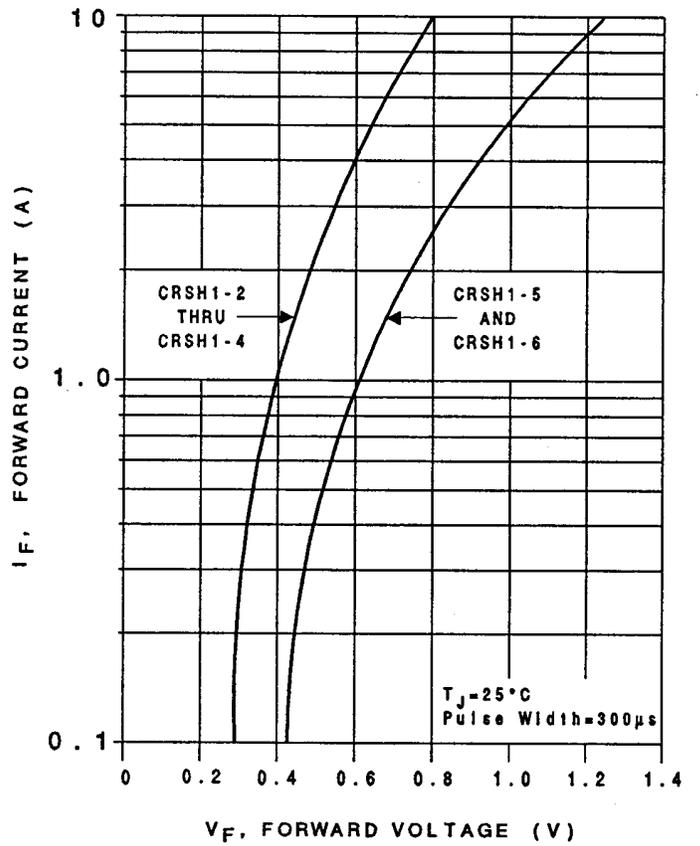
(OVER)

# CRSH1 SERIES RATING AND CHARACTERISTIC CURVES

FORWARD DERATING CURVE



TYPICAL FORWARD CHARACTERISTICS



## MECHANICAL OUTLINE

ALL DIMENSIONS IN INCHES (mm).

