

CentralTM Semiconductor Corp.

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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	θ_{JA}			15			$^\circ\text{C/W}$

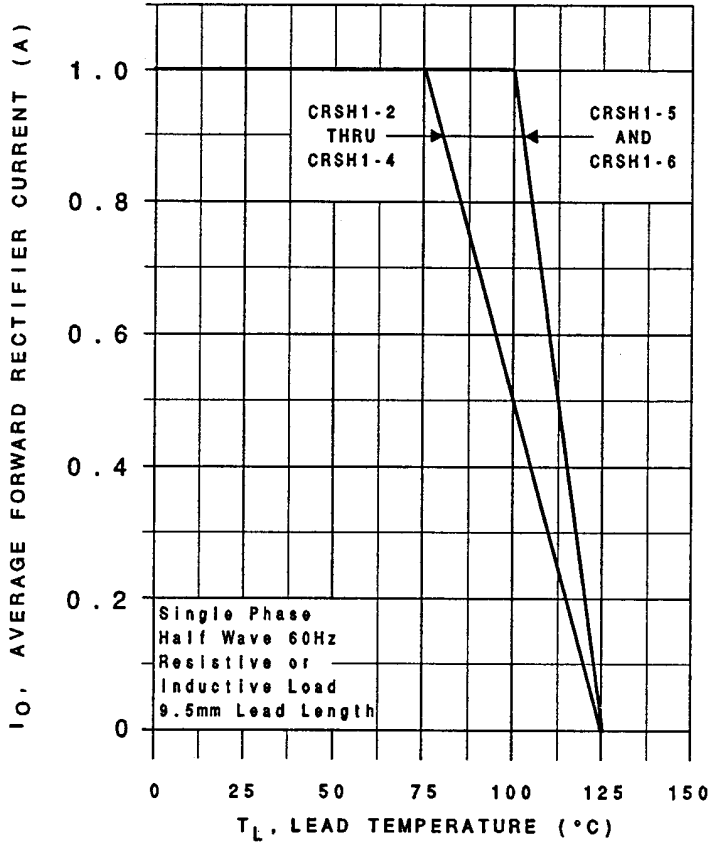
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

<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

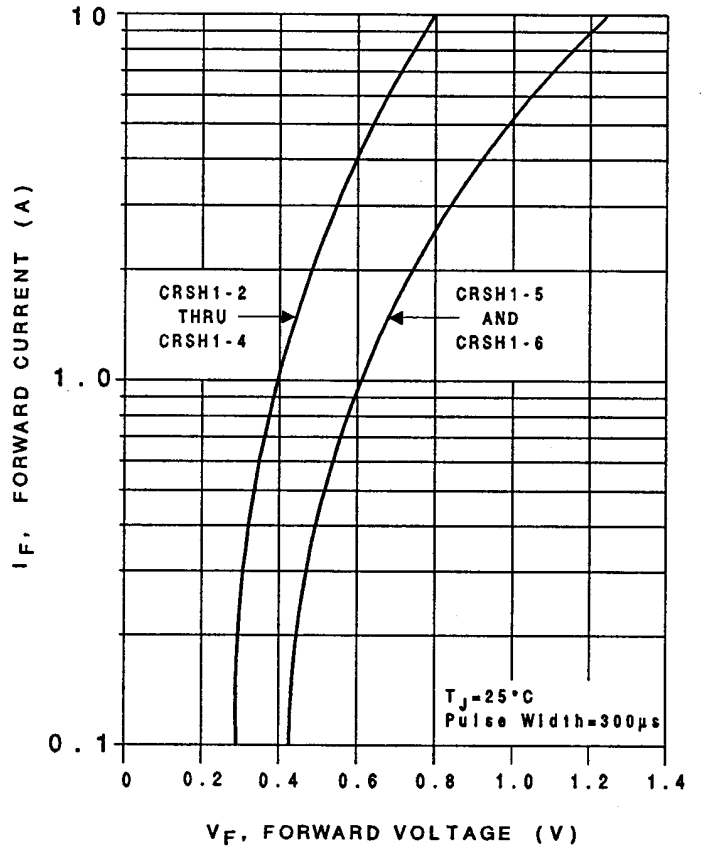
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CRSH1 SERIES RATING AND CHARACTERISTIC CURVES

FORWARD DERATING CURVE



TYPICAL FORWARD CHARACTERISTICS



MECHANICAL OUTLINE

ALL DIMENSIONS IN INCHES (mm).

