

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

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Manufacturers of World Class Discrete Semiconductors

CRSH16D-40FP  
CRSH16D-60FP  
CRSH16D-100FP

SILICON SCHOTTKY RECTIFIERS  
DUAL, COMMON CATHODE  
16 AMP, 40 THRU 100 VOLTS

TO-220FP CASE

## FEATURES:

- HIGH RELIABILITY.
- HIGH CURRENT CAPABILITY.
- UL FLAMMABILITY CLASSIFICATION 94V-0.
- LOW POWER LOSS, HIGH EFFECIENCY.
- LOW FORWARD VOLTAGE.
- HIGH SURGE CAPACITY.
- SUPERIOR LOT TO LOT CONSISTENCY.
- HIGH VOLTAGE.

## DESCRIPTION:

The CENTRAL SEMICONDUCTOR CRSH16D-40FP Series types are Silicon Schottky Rectifiers designed for fast switching applications requiring a low forward voltage drop.

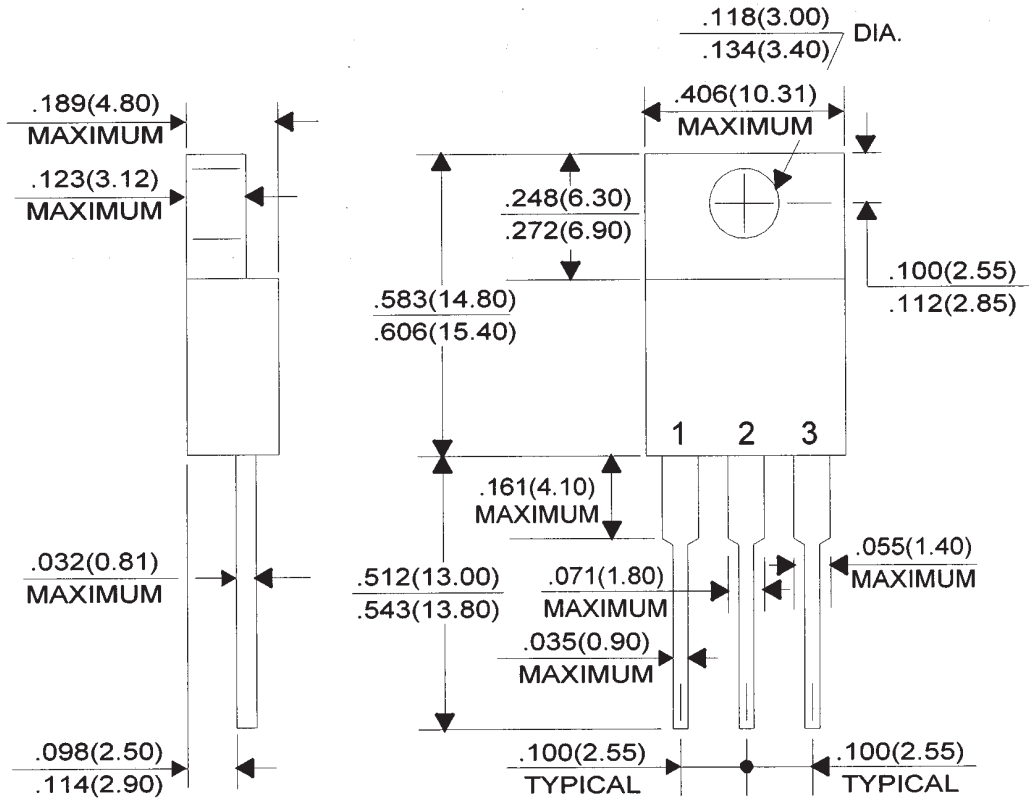
**MAXIMUM RATINGS:** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

	<u>SYMBOL</u>	<u>CRSH16D -40FP</u>	<u>CRSH16D -60FP</u>	<u>CRSH16D -100FP</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	60	100	V
DC Blocking Voltage	$V_R$	40	60	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	26	42	80	V
Average Forward Current ( $T_C=90^\circ\text{C}$ )	$I_O$		16		A
Peak Forward Surge Current (8.3ms)	$I_{FSM}$		150		A
Critical Rate of Rise of Reverse Voltage	$dV/dt$		10,000		V/ $\mu\text{s}$
Operating and Storage					
Junction Temperature	$T_J, T_{stg}$		-65 to +150		$^\circ\text{C}$
Typical Thermal Resistance	$\Theta_{JC}$		4.0		$^\circ\text{C/W}$
Typical Thermal Resistance	$\Theta_{JA}$		60		$^\circ\text{C/W}$

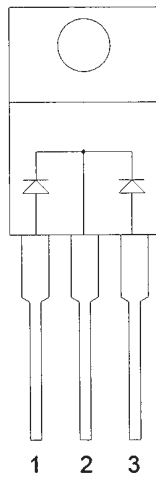
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>CRSH16D -40FP</u>		<u>CRSH16D -60FP</u>		<u>CRSH16D -100FP</u>		<u>UNITS</u>
		<u>TYP</u>	<u>MAX</u>	<u>TYP</u>	<u>MAX</u>	<u>TYP</u>	<u>MAX</u>	
$I_R$	$V_R=\text{Rated } V_{RRM}$		100		100		100	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_C=125^\circ\text{C}$		15		15		15	mA
$V_F$	$I_F=8.0\text{A}$		0.65		0.75		0.85	V
$V_F$	$I_F=8.0\text{A}, T_C=125^\circ\text{C}$		0.57		0.65		0.75	V
$V_F$	$I_F=16\text{A}$		0.84		0.95		1.10	V
$V_F$	$I_F=16\text{A}, T_C=125^\circ\text{C}$		0.72		0.85		1.00	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	300		300		300		pF

# TO-220FP MECHANICAL OUTLINE



All Dimensions in Inches (mm).



LEAD CODE:

- 1) ANODE#1
- 2) CATHODE
- 3) ANODE #2

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