

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

DUAL, COMMON CATHODE
SILICON SCHOTTKY RECTIFIERS
16 AMP, 400 THRU 100 VOLT



TO-220FP CASE



www.centralemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CRSH16D-40FP series devices are dual silicon Schottky rectifiers designed for fast switching applications requiring a low forward voltage drop.

MARKING: FULL PART NUMBER

FEATURES:

- High reliability
- High current capability
- UL flammability classification 94V-O
- Low power loss, high efficiency
- Low forward voltage
- High surge capacity
- High voltage

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

	SYMBOL	CRSH16D -40FP	CRSH16D -60FP	CRSH16D -100FP	UNITS
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 ($t_p=8.3\text{ms}$)	I_{FSM}		150		A
Critical Rate of Rise of Reverse Voltage	dv/dt		10,000		V/ μs
Operating and Storage Junction Temperature	T_J, T_{stg}		-65 to +150		$^\circ\text{C}$
Typical Thermal Resistance	Θ_{JC}		4.0		$^\circ\text{C/W}$
Typical Thermal Resistance	Θ_{JA}		60		$^\circ\text{C/W}$

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

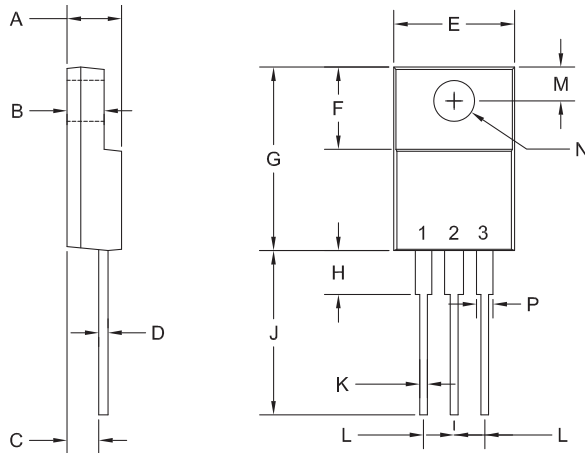
SYMBOL	TEST CONDITIONS	CRSH16D -40FP		CRSH16D -60FP		CRSH16D -100FP		UNITS
		TYP	MAX	TYP	MAX	TYP	MAX	
I_R	$V_R=\text{Rated } V_{RRM}$	-	200	-	200	-	200	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_C=125^\circ\text{C}$	-	15	-	15	-	15	mA
V_F	$I_F=8.0\text{A}$	-	0.65	-	0.75	-	0.85	V
V_F	$I_F=8.0\text{A}, T_C=125^\circ\text{C}$	-	0.57	-	0.65	-	0.75	V
V_F	$I_F=16\text{A}$	-	0.84	-	0.95	-	1.1	V
V_F	$I_F=16\text{A}, T_C=125^\circ\text{C}$	-	0.72	-	0.85	-	1.0	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	300	-	300	-	300	-	pF

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TO-220FP CASE - MECHANICAL OUTLINE

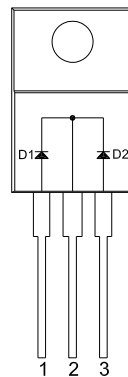


SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.165	0.202	4.20	5.12
B	0.090	0.130	2.30	3.30
C	0.098	0.122	2.50	3.10
D	-	0.031	-	0.80
E	0.382	0.418	9.70	10.63
F	0.238	0.276	6.06	7.00
G	0.583	0.640	14.80	16.25
H	-	0.161	-	4.10
J	0.506	0.543	12.85	13.80
K	0.020	0.031	0.50	0.79
L	0.100		2.54	
M	0.120	0.140	3.05	3.55
N (DIA)	0.116	0.134	2.95	3.40
P	0.039	0.058	1.00	1.47

TO-220FP (REV: R4)

R4

PIN CONFIGURATION



LEAD CODE:

- 1) Anode D1
- 2) Cathode D1, D2
- 3) Anode D2

MARKING:

FULL PART NUMBER

R2 (20-May 2015)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms



<http://www.centrasemi.com>

Product End of Life Notification

PDN ID:	PDN01228
Notification Date:	4/28/22
Last Buy Date:	10/28/22
Last Shipment Date	4/28/23

Summary: The CRS16D-100FP Schottky rectifier is discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Portfolio Management. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

<u>Central Part Number</u>	<u>Suggested Replacement</u>
CRS16D-100FP	N/A

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit <https://my.centrasemi.com/submit-inquiry?type=ER> to submit an online inquiry.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.