

CentralTM Semiconductor Corp.

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Phone (631) 435-1110 FAX (631) 435-1824
Manufacturer of World Class Discrete Semiconductors
www.centralsemi.com

CR3F-010 SERIES

3.0 AMP FAST RECOVERY RECTIFIER

JEDEC D0-201AD CASE

DESCRIPTION: The CENTRAL SEMICONDUCTOR CR3F Series types are Axial Lead Silicon Rectifiers designed for DC Power Supply and Inverter applications where fast recovery times are needed.

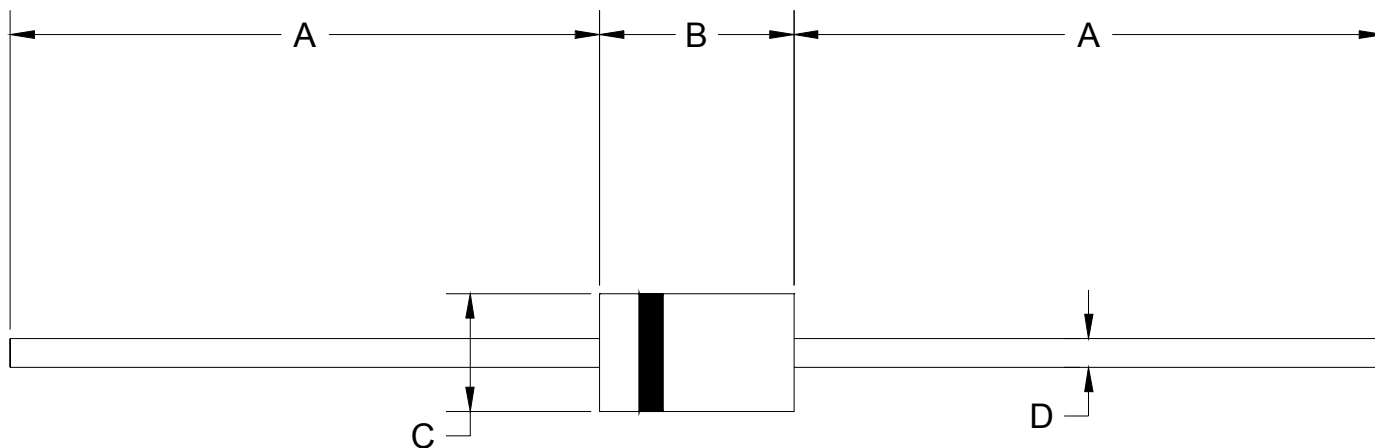
MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

	SYMBOL	CR3F-010	CR3F-020	CR3F-040	CR3F-060	CR3F-080	CR3F-100	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Forward Current ($T_A=90^{\circ}\text{C}$)	I_O				3.0			A
Peak Forward Surge Current (8.3ms)	I_{FSM}				150			A
Operating Temperature Range	T_J				-55 to +125			$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}				-55 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)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}, T_C=25^{\circ}\text{C}$		5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_C=100^{\circ}\text{C}$		100	μA
V_F	$I_F=3.0\text{A}$		1.2	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$ (CR3F-010, -020, -040)		150	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$ (CR3F-060)		250	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$ (CR3F-080, -100)		500	ns
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$ (CR3F-010, -020, -040)	65		pF
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$ (CR3F-060, -080, -100)	40		pF

(SEE REVERSE SIDE)

JEDEC DO-201AD CASE - MECHANICAL OUTLINE

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.000	-	25.40	-
B	0.283	0.375	7.20	9.53
C	0.189	0.210	4.80	5.33
D	0.047	0.052	1.20	1.32

DO-201AD (REV: R1)

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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

Corporate Headquarters & Customer Support Team

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Worldwide Distributors:
www.centrasemi.com/wwdistributors

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:	PDN01058
Notification Date:	8/19/16
Last Buy Date:	2/19/17
Last Shipment Date	8/19/17

Summary: The CR3F-010 series of Fast Recovery Rectifiers 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 various 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 Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

Central Part Number	Replacement
CR3F-010 BK	CR5F-060 BK
CR3F-020 BK	CR5F-060 BK
CR3F-020 TR	CR5F-060 TR
CR3F-040 BK	CR5F-060 BK
CR3F-060 BK	CR5F-060 BK
CR3F-060 TR	CR5F-060 TR
CR3F-060GPP BK	CR5F-060 BK
CR3F-080 BK	CR5F-100 BK
CR3F-100 BK	CR5F-100 BK
CR3F-100 TR	CR5F-100 TR

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. Please email your requests to engineering@centrasemi.com.

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.