

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

145 Adams Avenue, Hauppauge, NY 11788 USA  
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Manufacturers of World Class Discrete Semiconductors

## CR30U-010 SERIES

30 AMP ULTRA FAST  
RECOVERY SILICON RECTIFIER  
100 THRU 800 VOLTS

JEDEC DO-4 CASE

### DESCRIPTION

The CENTRAL SEMICONDUCTOR CR30U-010 Series types are 30 Amp stud mounted ultra fast recovery silicon rectifiers which are high quality, well constructed, highly reliable components designed for use in all types of military, commercial, industrial, entertainment, computer, and automotive applications.

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

	SYMBOL	CR30U -010	CR30U -015	CR30U -020	CR30U -040	CR30U -060	CR30U -080	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	150	200	400	600	800	V
DC Blocking Voltage	$V_R$	100	150	200	400	600	800	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	105	140	280	420	560	V
Average Forward Current ( $T_C = 120^\circ\text{C}$ )	$I_O$	30	30	30	30	30	30	A
Peak Forward Surge Current	$I_{FSM}$	500	500	500	-	-	-	A
Peak Forward Surge Current	$I_{FSM}$	-	-	-	400	-	-	A
Peak Forward Surge Current	$I_{FSM}$	-	-	-	-	300	300	A
Operating and Storage								
Junction Temperature	$T_J, T_{stg}$				-65 to +175			$^\circ\text{C}$
Thermal Resistance	$\theta_{JC}$				1.8			$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	CR30U-010		CR30U-015		CR30U-020		CR30U-040		CR30U-060		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
$V_F$	$I_F = 30\text{A}$		0.975					1.20			1.30	V
$I_R$	$V_R = \text{Rated } V_{RRM}$		25					25			25	$\mu\text{A}$
$I_R$	$V_R = \text{Rated } V_{RRM}, T_C = 125^\circ\text{C}$		3.0					3.0			3.0	mA
$t_{rr}$	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, \text{Recov to } 0.25\text{A}$		35					50			75	ns

NOTE: Normal Polarity: Cathode to Stud (Case)  
For Reverse Polarity add "R" Suffix (Ex: CR30U-040R)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

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**Worldwide Field Representatives:**  
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**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

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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/terms)



<http://www.centrasemi.com>

# Product End of Life Notification

<b>PDN ID:</b>	PDN01086
<b>Notification Date:</b>	5/04/18
<b>Last Buy Date:</b>	11/04/18
<b>Last Shipment Date</b>	5/04/19

Summary: All 30 Amp Ultra-Fast Recovery Rectifiers in the DO-4 package are 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 Management Process. 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.

<u>Central Part Number</u>	<u>Replacement</u>
CR30U-020	N/A
CR30U-060	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. Please email your requests to [engineering@centrasemi.com](mailto: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.