



### **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CR250-2 series types are 200mA axial lead high voltage silicon rectifiers designed for general purpose high voltage applications.

#### MARKING: FULL PART NUMBER

SYMBOL	<u>CR250-2</u>	<u>CR250-3</u>	<u>CR250-4</u>	UNITS
VR	2000	3000	4000	V
V <sub>RRM</sub>	2000	3000	4000	V
V <sub>R(RMS)</sub>	1400	2100	2800	V
IO		200		mA
<sup>I</sup> FSM		30		А
TJ, Tstg		-65 to +150		°C
	VR VRRM VR(RMS) I <sub>O</sub> IFSM	V <sub>R</sub> 2000 V <sub>RRM</sub> 2000 V <sub>R(RMS)</sub> 1400 I <sub>O</sub> I <sub>FSM</sub>	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	VR 2000 3000 4000   VRRM 2000 3000 4000   VR(RMS) 1400 2100 2800   IO 200 300 4000

#### ELECTRICAL CHARACTERISTICS: (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
IR	V <sub>R</sub> =Rated V <sub>RRM</sub>		5.0	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>A</sub> =100°C		50	μΑ
V <sub>F</sub>	I <sub>R</sub> =200mA (CR250-2)		3.0	V
V <sub>F</sub>	I <sub>R</sub> =200mA (CR250-3)		4.0	V
V <sub>F</sub>	I <sub>R</sub> =200mA (CR250-4)		5.0	V
СЈ	V <sub>R</sub> =4.0V, f=1.0MHz	30		pF

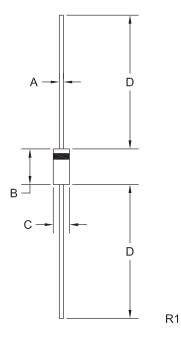
R2 (30-September 2009)



**CR250-2 SERIES** 

HIGH VOLTAGE SILICON RECTIFER 2000 THRU 4000 VOLTS 200mA

### **DO-15 CASE - MECHANICAL OUTLINE**



DIMENSIONS				
	INCHES		MILLIM	ETERS
SYMBOL	MIN	MAX	MIN	MAX
A	0.028	0.034	0.71	0.86
В	0.230	0.300	5.84	7.62
С	0.104	0.140	2.64	3.56
D	1.000	-	25.40	-

DO-15 (REV: R1)

MARKING: FULL PART NUMBER

R2 (30-September 2009)

# **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 (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

### CONTACT US

#### **Corporate Headquarters & Customer Support Team**

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA Main Tel: (631) 435-1110 Main Fax: (631) 435-1824 Support Team Fax: (631) 435-3388 www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors: www.centralsemi.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: <u>www.centralsemi.com/terms</u>

www.centralsemi.com





PDN01000 8/03/15 Varies Varies

Summary: The purpose of this End of Life Notification is to identify the standard packaged devices that Central previously discontinued without notification. This list excludes custom and bare die devices. The discontinuance of these devices predates Central's current EOL notification process. The notification process now utilized by Central is industry standard and future product discontinuation notifications will be issued accordingly. We apologize for any inconvenience caused.

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
	CBRSDSH5-40	CBRSDSH2-40
	CBRSDSH5-60	CBRSDSH2-60
	CBR10-010	CBR10-010P
	CBR10-020	CBR10-020P
	CBR10-040	CBR10-040P
	CBR10-080	CBR10-080P
	CBR25-010	CBR25-010P
	CBR25-020	CBR25-020P
	CBR25-040	CBR25-040P
	CBR25-060	CBR25-060P
	CBR25-080	CBR25-080P
	CBR25-100	CBR25-100P
	CBR35-010	CBR35-010P
	CBR35-020	CBR35-020P
	CBR35-040	CBR35-040P
	CBR35-060	CBR35-060P
	CBR35-100	CBR35-100P
	CCLHM080	CMJH080
	CCLHM100	CMJH100
	CCLHM120	CMJH120
	CCLHM150	CMJH150
	CCLM0035	N/A
	CCLM0130	CMJ0130
	CCLM0300	CMJ0300
	CCLM0500	CMJ0500
	CCLM0750	CMJ0750
	CCLM1000	CMJ1000
	CCLM1500	CMJ1500
	CCLM2000	CMJ2000
	CCLM2700	CMJ2700
	CCLM3500	CMJ3500
	CCLM4500	CMJ4500
	CCLM5750	CMJ5750
	CED2838E	N/A
	CLLR1-01	CMR1-01M
*:	** CONTINUED ***	



PDN01000 8/03/15 Varies Varies

Central Part Number	Replacement
CLLR1-02	CMR1-02M
CLLR1-02 CLLR1-04	CMR1-04M
CLLR1-04	CMR1-06M
CLLR1-10	CMR1-10M
CLLR1F-02	CMR1F-02M
CLLR1F-06	CMR1F-06M
CLLR1F-10	CMR1F-10M
CLLR1U-01	CMR1U-01M
CLLR1U-02	CMR1U-02M
CLLR1U-04	CMR1U-04M
CLLSH1-20	CMSH1-20M
CLLSH1-40	CMSH1-40M
CLLSH1-60	CMSH1-40M CMSH1-60M
CLL4104	CMHZ4104
CLL4116	CMHZ4116
CLL4110 CLL4122	CMHZ4110 CMHZ4122
CLL4122 CLL457A	CMHD457A
CLL457A CLL459A	CMHD457A CMHD459A
CLL459A CLL4614	CMHD439A CMHZ4614
CLL4614 CLL4615	CMHZ4614 CMHZ4615
CLL4613 CLL4617	CMHZ4613 CMHZ4617
CLL4617 CLL4619	CMHZ4617 CMHZ4619
CLL4619 CLL4620	CMHZ4619 CMHZ4620
CLL4625	CMHZ4620 CMHZ4625
CLL4625 CLL4626	CMHZ4625 CMHZ4626
CLL4627	CMHZ4627
CLL4678 CLL4679	CMHZ4678 CMHZ4679
CLL4679 CLL4680	CMHZ4679 CMHZ4680
CLL4681	CMHZ4681 CMUZ4682
CLL4682	CMHZ4682 CMHZ4683
CLL4683	
CLL4684	CMHZ4684
CLL4685	CMHZ4685
CLL4686	CMHZ4686
CLL4687	CMHZ4687
CLL4688	CMHZ4688
CLL4689	CMHZ4689
CLL4690	CMHZ4690
CLL4690C	CMHZ4690C
CLL4691	CMHZ4691
CLL4692	CMHZ4692
CLL4693	CMHZ4693
CLL4694	CMHZ4694
CLL4694C	CMHZ4694C
*** CONTINUED ***	



PDN01000 8/03/15 Varies Varies

Central Part Number	Replacement
CLL4696	CMHZ4696
CLL4697	CMHZ4697
CLL4698	CMHZ4698
CLL4699	CMHZ4699
CLL4700	CMHZ4700
CLL4701	CMHZ4701
CLL4702	CMHZ4702
CLL4703	CMHZ4703
CLL4704	CMHZ4704
CLL4705	CMHZ4705
CLL4707	CMHZ4707
CLL4708	CMHZ4708
CLL4709	CMHZ4709
CLL4709C	CMHZ4709C
CLL4711	CMHZ4711
CLL4713	CMHZ4713
CLL4714	CMHZ4714
CLL4715	CMHZ4715
CLL4716	CMHZ4716
CLL4717	CMHZ4717
CLL4728	CLL4728A
CLL5001	CMPD5001
CLL5221B	CMHZ5221B
CLL5222A	N/A
CLL5222B	CMHZ5222B
CMEDA-6I	N/A
CMPD300	CMPD300 BK
CMPD400	CMPD400 BK
CMPTA42	CMPTA42E
CMPTA92	CMPTA92E
CMPT3640	CMPT4209
CMWSH-4	N/A
CMZ5337D	N/A
CM2894A	CM4209
CN1671A	N/A
CN5281B	1N5281B
CN695	N/A
CR150-005	N/A
CR150-005R	N/A
CR150-010	N/A
CR150-020	N/A
CR150-040	N/A
CR150-040R	N/A
CR150-080	N/A
CR150-080R	N/A
*** CONTINUED ***	



PDN01000 8/03/15 Varies Varies

Central Part Number	Replacement
CR250-020	N/A
CR250-080	N/A
CR250-080R	N/A
CR250-120	N/A
CR250-120R	N/A
CR250-2	N/A
CR250-3	N/A
CR250F-3	N/A
CR250F-4	N/A
CR3-005	CR3-005GPP
CR3-010	CR3-010GPP
CR3-020	CR3-020GPP
CR3-040	CR3-040GPP
CR3-060	CR3-060GPP
CR3-080	CR3-080GPP
CR3-100	CR3-100GPP
CR3-120	CR3-120GPP
CR3U-100	N/A
CR6AF2	CR6AF2GPP
CR6A4	CR6A4GPP
CSMS15	N/A
CSMS24	N/A
CSTB162	N/A
CSTB165	N/A
CSTB362	N/A
CSTB365	N/A
CSTB462	N/A
CSTB465	N/A
CSTB567	N/A
CSTB568	N/A
CSTB569	N/A
CTLDM7003T-M563D	N/A
CTLDM7120-M832D	CTLDM7120-M832DS
CTLDM7181-M832D	N/A
CTLDM8120-M832D	CTLDM8120-M832DS
CTLM1034-M832D	N/A
CTLM1074-M832D	N/A
CTLM3410-M832D	N/A
CTLM3474-M832D	N/A
CTLM7110-M832D	N/A
CTLM7410-M832D	N/A
CTLM8110-M832D	N/A
CTLSH1-40M322	CTLSH1-40M322S
CTLSH1-40M563	N/A
CTL CILL 40M022D	CTLSH1-40M832DS
CTLSH1-40M832D	C1L5111 4010052D5



PDN01000 8/03/15 Varies Varies

Central Part Number	Replacement	
CTLSH10-60M856	N/Ā	
CTLSH2-40M832	N/A	
CTLSH3-30M833	CTLSH3-30M833S	
CTLSH5-40M833	CTLSH5-40M833S	
CTLS5064-M532	N/A	
CTLS5064R-M532	N/A	
CTLT3410-M521	N/A	
CTLT5551-M832D	N/A	
CTLT7410-M521	N/A	
CTLT853-M833	CTLT853-M833S	
CTLT953-M833	CTLT953-M833S	
CYTA44D	N/A	
CYTA4494D	N/A	
CYT5551D	N/A	
CYT5551HCD	N/A	
CYT7090LD	N/A	
CZT900K	N/A	
MMPQ2222A	N/A	
MMPQ2907A	N/A	
MMPQ3904	N/A	
MMPQ3906	N/A	
MMPQ6502	N/A	
MM4258	CM4209	
PN2894	PN4209	
PN3640	PN4209	
PN4258	PN4209	
PN5910	PN4209	
1N277	N/A	
1N34A	N/A	
1N355	N/A	
1N4444	1N4148	
1N4634	N/A	
1N4944	1N4946	
1N5333B	N/A	
1N5334B	CZ5334B	
1N5335B	CZ5335B	
1N5336B	CZ5336B	
1N5337B	CZ5337B	
1N5338B	CZ5338B	
1N5339B	CZ5339B	
1N5339C	N/A	
1N5340B	CZ5340B	
1N5341B	CZ5341B	
1N5341C	N/A	
1N5342B	CZ5342B	
** CONTINUED ***		



PDN01000 8/03/15 Varies Varies

Central Part Number	Replacement	_
1N5342C	N/Å	
1N5343B	CZ5343B	
1N5343C	N/A	
1N5344B	CZ5344B	
1N5345B	CZ5345B	
1N5346B	CZ5346B	
1N5347B	CZ5347B	
1N5348B	CZ5348B	
1N5349B	CZ5349B	
1N5350B	CZ5350B	
1N5350C	N/A	
1N5351B	CZ5351B	
1N5351C	N/A	
1N5352B	CZ5352B	
1N5355B	CZ5355B	
1N5356B	CZ5356B	
1N5357B	CZ5357B	
1N5358B	CZ5358B	
1N5359B	CZ5359B	
1N5360B	CZ5360B	
1N5361B	CZ5361B	
1N5362B	CZ5362B	
1N5364B	CZ5364B	
1N5365B	CZ5365B	
1N5368B	CZ5368B	
1N5370B	CZ5370B	
1N5373B	CZ5373B	
1N5374B	CZ5374B	
1N5375B	CZ5375B	
1N5376B	CZ5376B	
1N5377B	CZ5377B	
1N5378B	CZ5378B	
1N5380B	CZ5380B	
1N5382B	CZ5382B	
1N5383B	CZ5383B	
1N5384B	CZ5384B	
1N5386B	CZ5386B	
1N5387B	CZ5387B	
1N5388B	CZ5388B	
1N5416	1N5419	
1N5417	1N5419	
1N5418	1N5419	
1N5559B	1N4736A	
1N5565B	1N4742A	
1N5586B	1N4763A	
** CONTINUED ***		



PDN01000 8/03/15 Varies Varies

# \*\*\* CONTINUED FROM PRIOR PAGE \*\*\*

Central Part Number	Replacement
1N60	N/Å
1N6263	CMDD6263
1N6373	1.5CE6.8A
1N64	N/A
1N645	CN645
1N647	CN647
1N649	CN649
1N67A	N/A
1N774	N/A
1N821A	CMKTC825A
1N823A	CMKTC825A
1N823A DO-7	CMKTC825A
1N825A	CMKTC825A
1N825A DO-7	CMKTC825A
1N827A	CMKTC825A
1N827A DO-7	CMKTC825A
1N829A	CMKTC825A
1N829A DO-7	CMKTC825A
1N87A	N/A
1N888	N/A
1N914B	1N4448
2N2411	CM4209
2N2412	CM4209
2N2609	2N5116
2N2646	2N4870
2N2840	N/A
2N2894	CM4209
2N3012	CM4209
2N3055H	N/A
2N3249	CM4209
2N3546	CM4209
2N3724A	2N3725A
2N3829	CM4209
2N4208	CM4209
2N4209	CM4209
2N5057	CM4209
2N5114	2N5116
2N5484	2N5485 H
2N5545	N/A
2N5771	PN4209
2N5950	2N5951
2N869	CM4209
2N869A	CM4209

\*\*\* CONTINUED \*\*\*



PDN01000 8/03/15 Varies Varies

### \*\*\* CONTINUED FROM PRIOR PAGE \*\*\*

### Central Part Number Replacement

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@centralsemi.com.



PDN01066 8/24/17 N/A N/A

Please be advised that Central Semiconductor must immediately discontinue the product(s) listed in the attached PDN notice. We are unable to accept any further orders for these products **unless** we have available inventory on hand.

You may have purchased one or more of the products listed. Please do not hesitate to contact your local Central Semiconductor sales representative with any questions or needs you may have. Central regrets any inconvenience this may cause.

Sincerely,

Central Semiconductor Corp.



PDN01066 8/24/17 N/A N/A

Summary: The CR250-4 High Voltage Silicon 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 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
CR250-4 BK	N/Â

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@centralsemi.com.