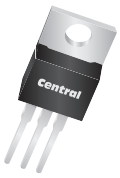
CS220-10B
CS220-10D
CS220-10M
CS220-10N

SILICON CONTROLLED RECTIFIERS
10 AMP, 200 THRU 800 VOLT



TO-220 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CS220-10B series types are epoxy molded SCRs designed for sensing circuit and control system applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C unless otherwise noted)

		CS220				
	SYMBOL	**-10B**	**-10D**	**-10M**	**-10N**	**UNITS**
Peak Repetitive Off-State Voltage	V_{DRM}, V_{RRM}	200	400	600	800	V
RMS On-State Current (T_C=90°C)	$I_{T(RMS)}$		10			A
Peak One Cycle Surge Current, t=10ms	I_{TSM}		100			A
I^2t Value for Fusing, t=10ms	I^2t		50			A^2s
Peak Gate Power Dissipation, tp=10μs	P_{GM}		40			W
Average Gate Power Dissipation	$P_{G(AV)}$		1.0			W
Peak Forward Gate Current, tp=10μs	I_{FGM}		4.0			A
Peak Forward Gate Voltage, tp=10μs	V_{FGM}		16			V
Peak Reverse Gate Voltage, tp=10μs	V_{RGM}		5.0			V
Critical Rate of Rise of On-State Current	di/dt		50			A/μs
Operating Junction Temperature	T_J		-40 to +125			°C
Storage Temperature	T_{stg}		-40 to +150			°C
Thermal Resistance	Θ_{JA}		60			°C/W
Thermal Resistance	Θ_{JC}		2.5			°C/W

ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

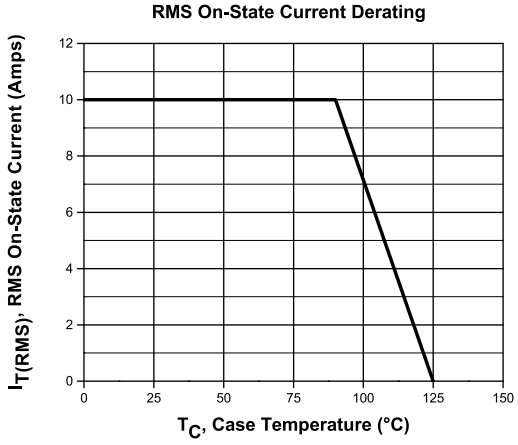
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**UNITS**
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}		10	μA
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}, T_C=125°C		2.0	mA
I_{GT}	V_D=12V, R_L=33Ω		15	mA
I_H	I_T=100mA		30	mA
V_{GT}	V_D=12V, R_L=33Ω		1.5	V
V_{TM}	I_{TM}=20A, tp=10ms		1.6	V
dv/dt	V_D=⅔Rated V_{DRM}, T_C=125°C	200		V/μs

R1 (24-October 2013)

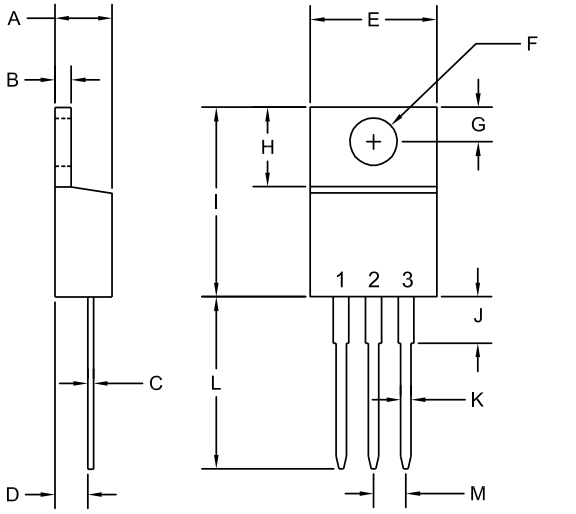
CS220-10B
CS220-10D
CS220-10M
CS220-10N

SILICON CONTROLLED RECTIFIERS
10 AMP, 200 THRU 800 VOLT

TYPICAL ELECTRICAL CHARACTERISTICS



TO-220 CASE - MECHANICAL OUTLINE



R2

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.170	0.190	4.31	4.82
B	0.045	0.055	1.15	1.39
C	0.013	0.026	0.33	0.65
D	0.083	0.107	2.10	2.72
E	0.394	0.417	10.01	10.60
F (DIA)	0.140	0.157	3.55	4.00
G	0.100	0.118	2.54	3.00
H	0.230	0.270	5.85	6.85
I	0.560	0.625	14.23	15.87
J	-	0.250	-	6.35
K	0.025	0.038	0.64	0.96
L	0.500	0.579	12.70	14.70
M	0.090	0.110	2.29	2.79

TO-220 (REV: R2)

LEAD CODE:
1) Cathode
2) Anode
3) Gate
Tab is common to pin 2

MARKING: FULL PART NUMBER

R1 (24-October 2013)

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

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:
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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.centralsemi.com/terms

http://www.centralsemi.com

Product End of Life Notification

PDN ID:	PDN01051
Notification Date:	8/24/16
Last Buy Date:	2/24/17
Last Shipment Date	8/24/17

Summary:The CS220 series of Silicon Controlled Rectifiers in the TO-220 case 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
CS220-10B	N/A
CS220-10D	N/A
CS220-10M	N/A
CS220-10N	N/A
CS220-12B	N/A
CS220-12D	N/A
CS220-12M	N/A
CS220-12N	N/A
CS220-12P	N/A
CS220-16B	N/A
CS220-16D	N/A
CS220-16M	N/A
CS220-16N	N/A
CS220-16P	N/A
CS220-25B	N/A
CS220-25D	N/A
CS220-25M	N/A
CS220-25N	N/A
CS220-25P	N/A
CS220-25PB	N/A
CS220-35M	N/A
CS220-35N	N/A
CS220-8B	N/A
CS220-8D	N/A
CS220-8F	N/A
CS220-8M	N/A
CS220-8N	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@centralsemi.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.