

200 THRU 800 VOLTS

TO-202 CASE



www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CS202-4B series type is an epoxy molded silicon controlled rectifier designed for sensing circuit applications and control systems.

MARKING: FULL PART NUMBER

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

MAXIMUM R	ATINGS: (T _C =25°C unless of	otherwise noted)					
			CS202	CS202	CS202	CS202	
Poak Ropotitivo Off State Voltage		SYMBOL	<u>-4B</u> 200	<u>-4D</u> 400	<u>-4M</u> 600	<u>-4N</u> 800	UNITS V
Peak Repetitive Off-State Voltage		V _{DRM} , V _{RRM}	200			000	-
RMS On-State Current (T _C =85°C)		IT(RMS)			.0		A
Peak One Cycle Surge (t=10ms)		ITSM	30			A	
I ² t Value for Fusing (t=10ms)		l ² t	4.5		A ² s		
Peak Gate Power (tp=20µs)		PGM		3.0		W	
Average Gate Power Dissipation		PG(AV)		0.2			W
Peak Gate Current (tp=20µs)		IGM		1.2			А
Critical Rate of Rise of On-State Current		di/dt		50			A/µs
Storage Temperature		T _{stg}	-40 to +150			°C	
Junction Temperature		Тј	-40 to +125			°C	
Thermal Resistance		Θ_{JA}		8	0		°C/W
Thermal Resistance		ΘJC		7	.5		°C/W
ELECTRICA	L CHARACTERISTICS: (T _C	=25°C unless oth	nerwise no	oted)			
SYMBOL TEST CONDITIONS			MIN		YP	MAX	UNITS
I _{DRM} , I _{RRM}	Rated V _{DRM} , V _{RRM} , R _{GK} =1.0KΩ					10	μA
I _{DRM} , I _{RRM}	_I , I _{RRM} Rated V _{DRM} , V _{RRM} , R _{GK} =1.0KΩ, T _C =125°C					200	μΑ
^I GT	V_D =12V, RL=10 Ω		20	3	38	200	μΑ
IН	I _T =50mA, R _{GK} =1.0KΩ			0	.25	2.0	mA
V _{GT}	V_D =12V, R _L =10 Ω			0	.55	0.8	V
V_{TM}	I _{TM} =8.0A, tp=380µs			1	.6	1.8	V
dv/dt $V_D = \frac{2}{3} V_{DRM}$, R _{GK} =1.0KΩ, T _C =125°C				10		V/µs	

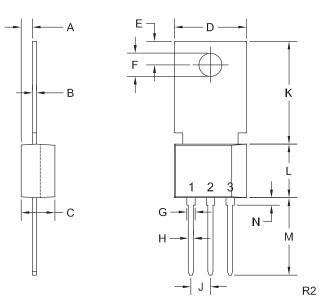
R4 (23-January 2012)



CS202-4B CS202-4D CS202-4M CS202-4N

4.0 AMP gSCR 200 THRU 800 VOLTS

TO-202 CASE - MECHANICAL OUTLINE



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

MARKING: FULL PART NUMBER

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
A	0.055	0.071	1.40	1.80			
В	0.016	0.024	0.40	0.60			
С	0.173	0.181	4.40	4.60			
D	0.374	0.413	9.50	10.5			
E	0.118	0.154	3.00	3.90			
F (DIA)	0.124	0.150	3.15	3.80			
G	0.035	0.055	0.90	1.40			
Н	0.023	0.031	0.59	0.80			
J	0.094	0.106	2.39	2.69			
K	0.459	0.559	11.66	14.21			
L	0.280	0.346	7.12	8.80			
М	0.406	0.531	10.3	13.5			
N	0.024	0.059	0.60	1.50			
		Т	O-202 (F	REV: R2)			

R4 (23-January 2012)

www.centralsemi.com

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: 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





http://www.centralsemi.com

PDN01052 8/24/16 2/24/17 8/24/17

Summary: The CS202 series of Silicon Controlled Rectifiers in the TO-202 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
CS202-4B	N/Ā
CS202-4B-2	N/A
CS202-4D	N/A
CS202-4D-2	N/A
CS202-4M	N/A
CS202-4M-2	N/A
CS202-4N	N/A
CS202-4N-2	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.