

CEN250B1
CEN250D1
CEN250M1

4.0 AMP SCR
200 THRU 600 VOLT



TO-202 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CEN250B1, CEN250D1, and CEN250M1 are epoxy molded silicon controlled rectifiers designed for sensing circuit applications and control systems.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_C=75^\circ\text{C}$ unless otherwise noted)

	SYMBOL	CEN250B1	CEN250D1	CEN250M1	UNITS
Peak Repetitive Off-State Voltage	V_{DRM}, V_{RRM}	200	400	600	V
RMS On-State Current	$I_T(\text{RMS})$		4.0		A
Peak One Cycle Surge ($t=8.3\text{ms}$)	I_{TSM}		20		A
Peak Gate Power	P_{GM}		500		mW
Average Gate Power Dissipation	$P_{G(AV)}$		100		mW
Peak Gate Current	I_{GM}		200		mA
Operating Junction Temperature	T_J		-40 to +125		$^\circ\text{C}$
Storage Temperature	T_{stg}		-40 to +150		$^\circ\text{C}$
Thermal Resistance	θ_{JA}		80		$^\circ\text{C/W}$
Thermal Resistance	θ_{JC}		7.5		$^\circ\text{C/W}$

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

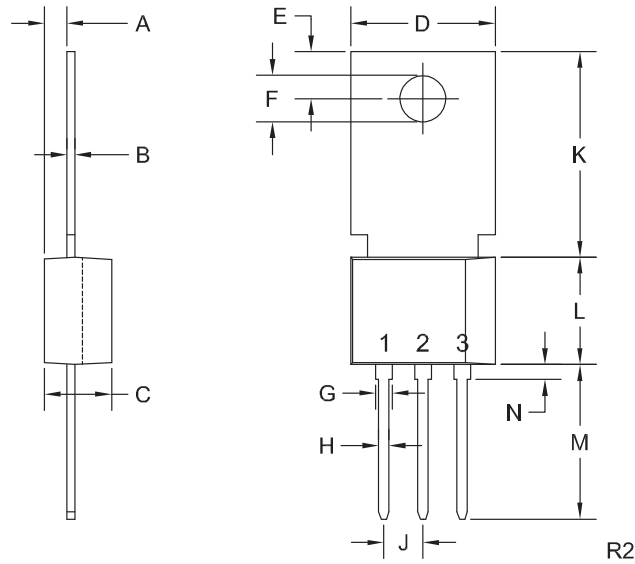
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{DRM}, I_{RRM}	Rated $V_{DRM}, V_{RRM}, R_{GK}=1.0\text{K}\Omega$		10	μA
I_{GT}	$V_D=12\text{V}, R_L=10\Omega$		200	μA
I_H	$I_T=50\text{mA}, R_{GK}=1.0\text{K}\Omega$		3.0	mA
V_{GT}	$V_D=12\text{V}, R_L=10\Omega$		0.8	V
V_{TM}	$I_{TM}=4.0\text{A}$		2.2	V

CEN250B
 CEN250D
 CEN250M

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TO-202 CASE - MECHANICAL OUTLINE



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

MARKING:
 FULL PART NUMBER

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.016	0.024	0.40	0.60
C	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
H	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
M	0.406	0.531	10.3	13.5
N	0.024	0.059	0.60	1.50

TO-202 (REV: R2)

R0 (13-May 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

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

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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

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