

NOT RECOMMENDED
FOR NEW DESIGN

CS223-2M
SURFACE MOUNT
SILICON CONTROLLED RECTIFIER
2.0 AMP, 600 VOLT

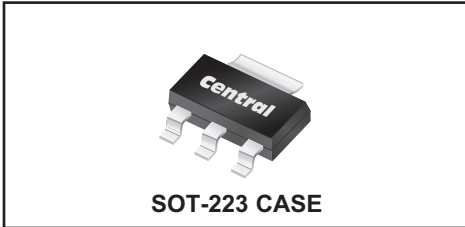


www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CS223-2M is an epoxy molded SCR designed for sensing circuit applications and control systems.

**NOT RECOMMENDED FOR NEW DESIGN-
USE CS223-4M**



SOT-223 CASE

MARKING: FULL PART NUMBER

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

	SYMBOL		UNITS
Peak Repetitive Off-State Voltage	V _{DRM} , V _{RRM}	600	V
RMS On-State Current (T _C =60°C)	I _{T(RMS)}	2.0	A
Peak One Cycle Surge, t=10ms	I _{TSM}	10	A
I ² t Value for Fusing, t=10ms	I ² t	0.5	A ² s
Peak Gate Power, tp=10µs	P _{GM}	2.0	W
Average Gate Power Dissipation	P _{G(AV)}	0.1	W
Peak Gate Current, tp=10µs	I _{GM}	1.0	A
Peak Gate Voltage, tp=10µs	V _{GM}	8.0	V
Operating Junction Temperature	T _J	-50 to +125	°C
Storage Temperature	T _{stg}	-50 to +150	°C
Thermal Resistance	θ _{JA}	62.5	°C/W

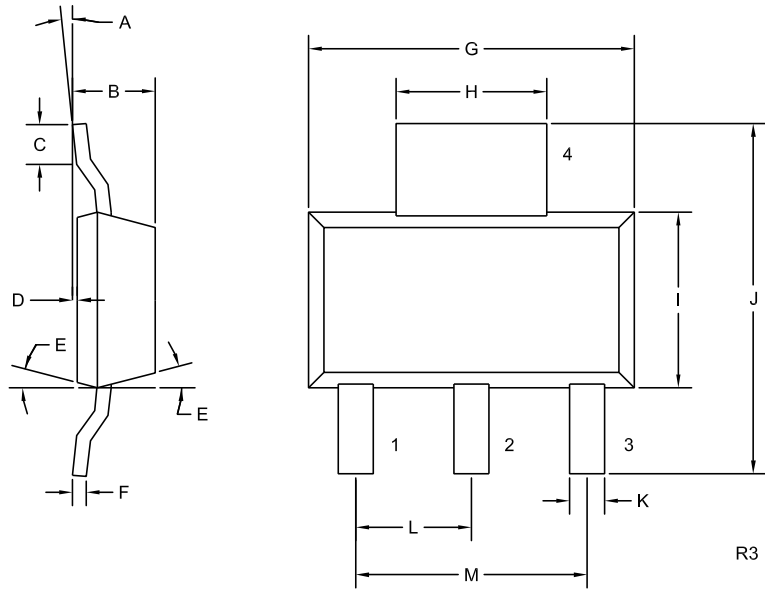
ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{DRM} , I _{RRM}	V _{DRM} , V _{RRM} =600V, R _{GK} =1.0KΩ			10	µA
I _{DRM} , I _{RRM}	V _{DRM} , V _{RRM} =600V, R _{GK} =1.0KΩ, T _C =125°C			100	µA
I _{GT}	V _D =12V, R _L =10Ω		38	200	µA
I _H	I _T =50mA, R _{GK} =1.0KΩ		1.0	2.0	mA
V _{GT}	V _D =12V, R _L =10Ω		0.55	0.8	V
V _{TM}	I _{TM} =4.0A, tp=380µs		1.4	1.7	V
dv/dt	V _D =400V, R _{GK} =1.0KΩ, T _C =125°C	10			V/µs

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SOT-223 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode
- 3) Gate
- 4) Anode

MARKING:
FULL PART NUMBER

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	10°	0°	10°
B	0.059	0.071	1.50	1.80
C	0.018	—	0.45	—
D	0.000	0.004	0.00	0.10
E	15°		15°	
F	0.009	0.014	0.23	0.35
G	0.248	0.264	6.30	6.70
H	0.114	0.122	2.90	3.10
I	0.130	0.146	3.30	3.70
J	0.264	0.287	6.70	7.30
K	0.024	0.033	0.60	0.85
L	0.091		2.30	
M	0.181		4.60	

SOT-223 (REV: R3)

R4 (6-January 2016)

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

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<http://www.centrasemi.com>

PDN01068

10/23/17

4/23/18

10/23/18

Summary: The CS223-2M silicon controlled rectifier is discontinued and is 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.

<u>Central Part Number</u>	<u>Replacement</u>
CS223-2M TR	CS223-4M TR H

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.