

CZR1-04

**SURFACE MOUNT
HIGH VOLTAGE
SILICON RECTIFIER**



SOT-223 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CZR1-04 type is a General Purpose Silicon Rectifier designed for applications requiring high voltage capability.

MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Reverse Voltage
Peak Reverse Voltage
Average Forward Current
Peak Forward Surge Current, $t=10\text{ms}$
Operating and Storage Junction Temperature
Power Dissipation
Thermal Resistance

SYMBOL

V_R 400
 V_{RM} 400
 I_O 1.0
 I_{FSM} 10
 T_J, T_{stg} -65 to +150
 P_D 2.0
 θ_{JA} 62.5

UNITS

V
V
A
A
 $^\circ\text{C}$
W
 $^\circ\text{C/W}$

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

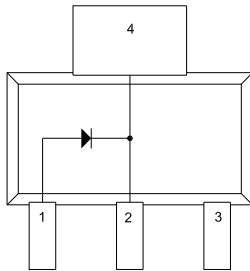
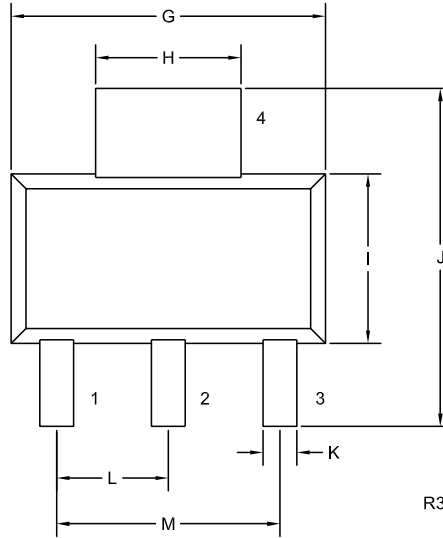
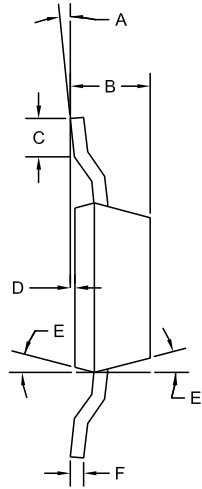
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=400\text{V}$			1.0	μA
I_R	$V_R=400\text{V}, T_A=150^\circ\text{C}$			50	μA
BV_R	$I_R=100\mu\text{A}$	400			V
V_F	$I_F=1.0\text{A}$			1.2	V
V_F	$I_F=2.0\text{A}$			1.5	V
t_{rr}	$I_F=200\text{mA}, I_R=200\text{mA}, I_{rr}=20\text{mA}$		1.0		μs
C_J	$V_R=0, f=1.0\text{MHz}$		26		pF

R5 (23-February 2010)

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SOT-223 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Anode
 - 2) Cathode
 - 3) No Connection
 - 4) Cathode
- Pin 2 and Pin 4 are common.

SYMBOL	DIMENSIONS			
	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)

MARKING: FULL PART NUMBER

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