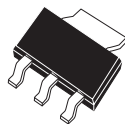


CZR1-04

**SURFACE MOUNT
HIGH VOLTAGE RECTIFIER**



SOT-223 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

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

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

	<u>SYMBOL</u>		<u>UNITS</u>
Reverse Voltage	V_R	400	V
Peak Reverse Voltage	V_{RM}	400	V
Average Forward Current	I_O	1.0	A
Peak Forward Surge Current, $t=1.0\mu\text{s}$	I_{FSM}	10	A
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Power Dissipation	P_D	2.0	W
Thermal Resistance	Θ_{JA}	62.5	$^{\circ}\text{C/W}$

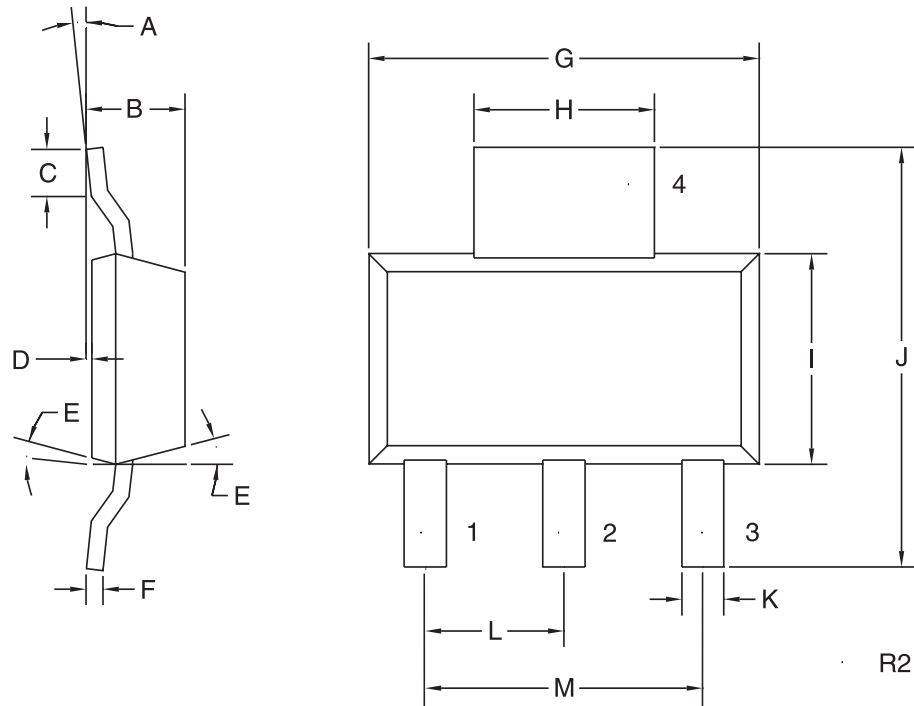
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
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	$V_R=0\text{V}, f=1.0\text{MHz}$		10		pF

R0 (14-November 2001)

**SURFACE MOUNT
HIGH VOLTAGE RECTIFIER**

SOT-223 CASE- MECHANICAL OUTLINE



LEAD CODE:

- 1) ANODE
- 2) CATHODE
- 3) NO CONNECTION
- 4) CATHODE

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	7°	0°	7°
B	0.063	0.067	1.60	1.70
C	0.022		0.55	
D	0.001	0.004	0.03	0.10
E	15°		15°	
F	0.009	0.013	0.23	0.33
G	0.248	0.264	6.30	6.71
H	0.114	0.122	2.90	3.10
I	0.130	0.146	3.30	3.71
J	0.264	0.287	6.71	7.29
K	0.024	0.031	0.61	0.79
L	0.091		2.31	
M	0.181		4.60	

SOT-223 (REV: R2)

R0 (14-November 2001)