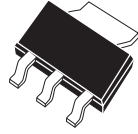


CZR1-04C

SURFACE MOUNT  
HIGH VOLTAGE  
DUAL COMMON CATHODE  
SILICON RECTIFIER



SOT-223 CASE

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CZR1-04C type is a Silicon General Purpose Dual Rectifier, connected in a Common Cathode configuration, designed for applications requiring high voltage capability.

**MARKING CODE: FULL PART NUMBER**

**MAXIMUM RATINGS (T<sub>A</sub>=25°C)**

	SYMBOL		UNITS
Reverse Voltage	V <sub>R</sub>	400	V
Peak Reverse Voltage	V <sub>RM</sub>	400	V
Average Forward Current	I <sub>O</sub>	2.0	A
Peak Forward Surge Current, t=10ms	I <sub>FSM</sub>	10	A
Operating and Storage			
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Power Dissipation	P <sub>D</sub>	2.0	W
Thermal Resistance	θ <sub>JA</sub>	62.5	°C/W

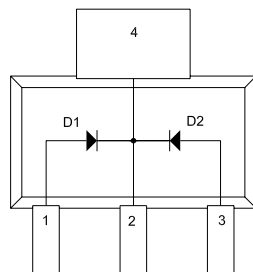
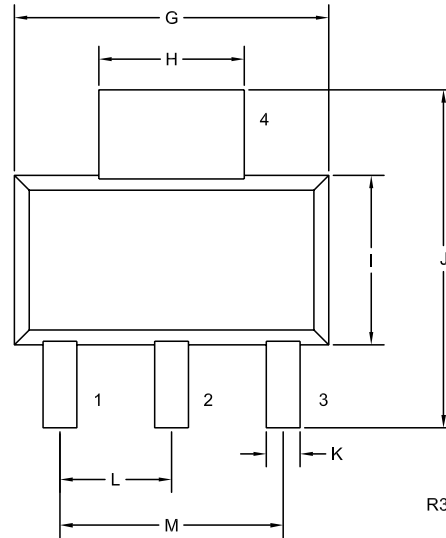
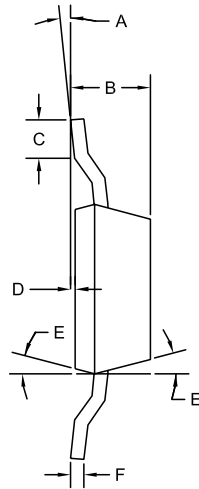
**ELECTRICAL CHARACTERISTICS PER DIODE: (T<sub>A</sub>=25°C unless otherwise noted)**

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =400V			1.0	μA
I <sub>R</sub>	V <sub>R</sub> =400V, T <sub>A</sub> =150°C			50	μA
BV <sub>R</sub>	I <sub>R</sub> =100μA	400			V
V <sub>F</sub>	I <sub>F</sub> =1.0A			1.2	V
V <sub>F</sub>	I <sub>F</sub> =2.0A			1.5	V
t <sub>tr</sub>	I <sub>F</sub> =200mA, I <sub>R</sub> =200mA, I <sub>RR</sub> =20mA		1.0		μs
C <sub>J</sub>	V <sub>R</sub> =0V, f=1.0MHz		10		pF

R5 (17-June 2004)

**SURFACE MOUNT  
HIGH VOLTAGE  
DUAL COMMON CATHODE  
SILICON RECTIFIER**

**SOT-223 CASE - MECHANICAL OUTLINE**



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)

**LEAD CODE:**

- 1) ANODE D1
- 2) CATHODE D1, D2
- 3) ANODE D2
- 4) CATHODE D1, D2

Pin 2 and Pin 4 are common.

**MARKING CODE:**

**FULL PART NUMBER**

R5 (17-June 2004)