

CXR1-04

**SURFACE MOUNT  
GENERAL PURPOSE  
SILICON RECTIFIER**



**SOT-89 CASE**

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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CXR1-04 type is a Silicon General Purpose Rectifier designed for applications requiring high voltage capability.

**MARKING: 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
Thermal Resistance

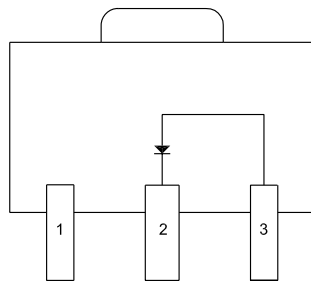
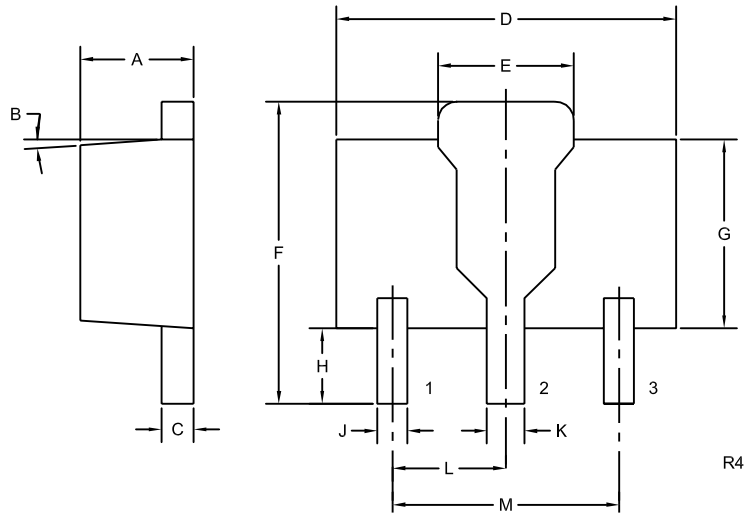
SYMBOL		UNITS
$V_R$	400	V
$V_{RM}$	400	V
$I_O$	1.0	A
$I_{FSM}$	10	A
$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
$P_D$	1.0	W
$\Theta_{JA}$	95	$^\circ\text{C/W}$
$\Theta_{JS}$	25	$^\circ\text{C/W}$

**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	$\mu\text{A}$
$I_R$	$V_R=400\text{V}, T_A=150^\circ\text{C}$			50	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	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		$\mu\text{s}$
$C_J$	$V_R=0\text{V}, f=1.0\text{MHz}$		26		pF

R6 (25-August 2008)

**SOT-89 CASE - MECHANICAL OUTLINE**



Bottom View  
(Tab not shown)

**LEAD CODE:**

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

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.067	1.40	1.70
B	4°		4°	
C	0.014	0.018	0.35	0.46
D	0.173	0.185	4.40	4.70
E	0.064	0.074	1.62	1.87
F	0.146	0.177	3.70	4.50
G	0.090	0.106	2.29	2.70
H	0.028	0.051	0.70	1.30
J	0.014	0.019	0.36	0.48
K	0.017	0.023	0.44	0.58
L	0.059		1.50	
M	0.118		3.00	

SOT-89 (REV: R4)

**MARKING:**

**FULL PART NUMBER**