

CentralTM Semiconductor Corp.

DESCRIPTION:

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

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

	SYMBOL		UNITS
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 $T_S=125^{\circ}\text{C}$	P_D	1.0	W
Thermal Resistance	θ_{JA}	95	$^{\circ}\text{C/W}$
Thermal Resistance	θ_{JS}	25	$^{\circ}\text{C/W}$

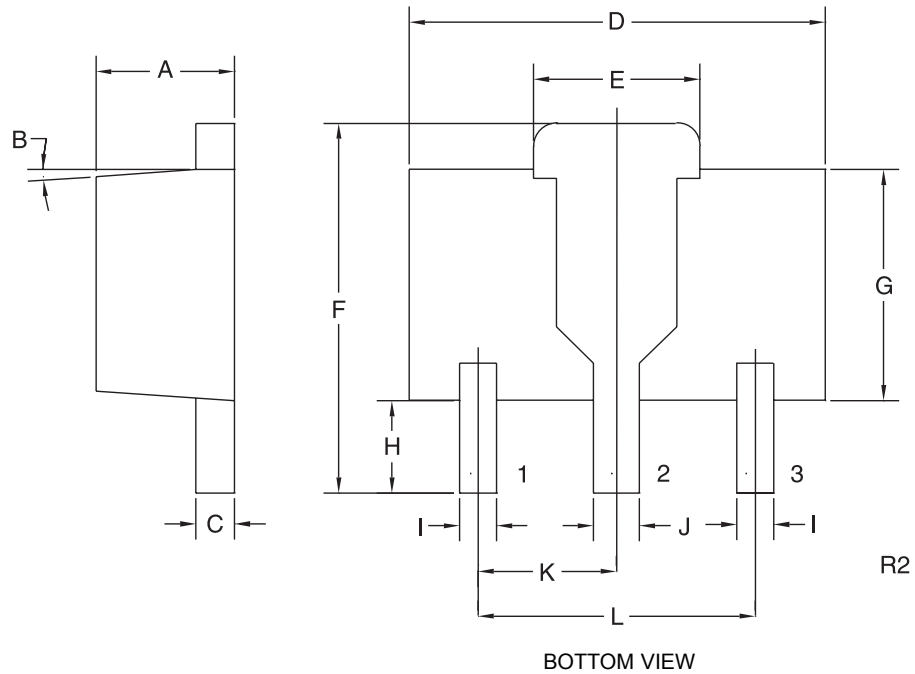
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=400\text{V}$			1.0	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	$I_F=1.0\text{A}$			1.6	V
V_F	$I_F=2.0\text{A}$			2.0	V
t_{rr}	$I_F=200\text{mA}, I_R=200\text{mA}, I_{RR}=20\text{mA}$		1.0		μs
C_D	$V_R=0\text{V}, f=1.0\text{MHz}$		10		pF

R0 (14-November 2001)

**SURFACE MOUNT
GENERAL PURPOSE RECTIFIER**

SOT-89 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.067	1.40	1.70
B	4°		4°	
C	0.016	0.018	0.40	0.46
D	0.173	0.185	4.40	4.70
E	0.070	0.074	1.79	1.87
F	0.146	0.177	3.70	4.50
G	0.094	0.106	2.40	2.70
H	0.028	0.051	0.70	1.30
I	0.015	0.019	0.38	0.48
J	0.019	0.023	0.48	0.58
K	0.059		1.50	
L	0.118		3.00	

SOT-89 (REV: R2)