

# SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIER

SOT-89 CASE



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# 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 <sub>A</sub> =25°C)	SYMBOL		UNITS
Reverse Voltage	VR	400	V
Peak Reverse Voltage	V <sub>RM</sub>	400	V
Average Forward Current	IO	1.0	А
Peak Forward Surge Current, t=10ms	IFSM	10	А
Operating and Storage Junction Temperature	T <sub>J,</sub> T <sub>stg</sub>	-65 to +150	°C
Power Dissipation	PD	1.0	W
Thermal Resistance	$\Theta_{JA}$	95	°C/W
Thermal Resistance	$\Theta_{JS}$	25	°C/W

### ELECTRICAL CHARACTERISTICS: (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
BVR	I <sub>R</sub> =100μΑ	400			V
VF	I <sub>F</sub> =1.0A			1.2	V
VF	I <sub>F</sub> =2.0A			1.5	V
t <sub>rr</sub>	I <sub>F</sub> =200mA, I <sub>R</sub> =200mA, I <sub>rr</sub> =20mA		1.0		μs
СЈ	V <sub>R</sub> =0, f=1.0MHz		26		pF

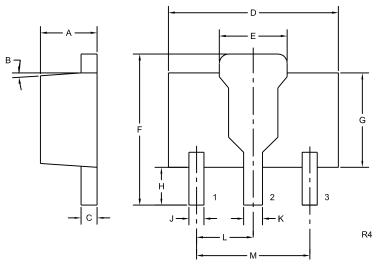
R7 (19-February 2010)





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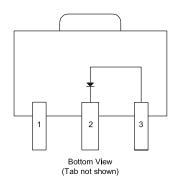
# SOT-89 CASE - MECHANICAL OUTLINE



(Bottom View)

LEAD CODE: 1) No Connection 2) Cathode 3) Anode

MARKING: FULL PART NUMBER



DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
А	0.055	0.067	1.40	1.70			
В	4°		4°				
С	0.014	0.018	0.35	0.46			
D	0.173	0.185	4.40	4.70			
Е	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			
Н	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				
М	0.118		3.00				
SOT-89 (REV: R4)							

R7 (19-February 2010)

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# **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**

#### **PRODUCT SUPPORT**

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- · Consolidated shipping options

#### **DESIGNER SUPPORT/SERVICES**

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities

ss your design challenges.

· Custom product packing

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

Custom product and package development

# **REQUESTING PRODUCT PLATING**

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

# CONTACT US

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