#### CXT4033

## SURFACE MOUNT PNP SILICON TRANSISTOR



www.centralsemi.com

#### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXT4033 type is an PNP silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high current general purpose amplifier applications.

MARKING: FULL PART NUMBER



MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Collector-Base Voltage	$V_{CBO}$	80	V
Collector-Emitter Voltage	$V_{CEO}$	80	V
Emitter-Base Voltage	$V_{EBO}$	5.0	V
Continuous Collector Current	IC	1.0	Α
Peak Collector Current	ICM	1.5	Α
Power Dissipation	$P_{D}$	1.2	W
Operating and Storage Junction Temperature	T <sub>J,</sub> T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	104	°C/W

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

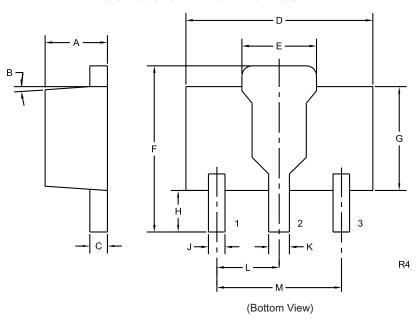
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =60V		50	nA
I <sub>EBO</sub>	V <sub>EB</sub> =5.0V		10	nA
BV <sub>CBO</sub>	I <sub>C</sub> =10μA	80		V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA	80		V
BVEBO	I <sub>E</sub> =10μA	5.0		V
V <sub>CE</sub> (SAT)	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.15	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		0.50	V
V <sub>BE</sub> (SAT)	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.90	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		1.10	V
h <sub>FE</sub>	$V_{CE}$ =5.0V, $I_{C}$ =0.1mA	75		
hFE	$V_{CE}$ =5.0V, $I_{C}$ =100mA	100	300	
hFE	$V_{CE}$ =5.0V, $I_{C}$ =500mA	70		
h <sub>FE</sub>	$V_{CE}$ =5.0V, $I_{C}$ =1.0A	25		
f <sub>T</sub>	$V_{CE}$ =10V, $I_{C}$ =50mA, f=1.0MHz	100		MHz
$C_{ob}$	$V_{CB}$ =10V, $I_E$ =0, f=1.0MHz		20	pF

## CXT4033

# SURFACE MOUNT PNP SILICON TRANSISTOR



## **SOT-89 CASE - MECHANICAL OUTLINE**



## LEAD CODE:

- 1) Emitter
- 2) Collector
- 3) Base

#### MARKING:

**FULL PART NUMBER** 

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	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			
Ĺ	0.059		1.50				
М	0.118		3.00				

SOT-89 (REV: R4)

## **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

- · Custom bar coding for shipments
- · Custom product packing

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

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

- Free guick 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

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- · 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).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

#### **CONTACT US**

#### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)