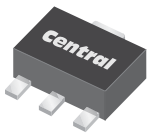
CXT5551HC

SURFACE MOUNT
HIGH CURRENT
NPN SILICON TRANSISTOR



SOT-89 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXT5551HC type is an high current NPN silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high voltage and high current amplifier applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Collector-Base Voltage	V_{CBO}	180	V
Collector-Emitter Voltage	V_{CEO}	160	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Continuous Collector Current	I_C	1.0	A
Power Dissipation	P_D	1.2	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	104	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

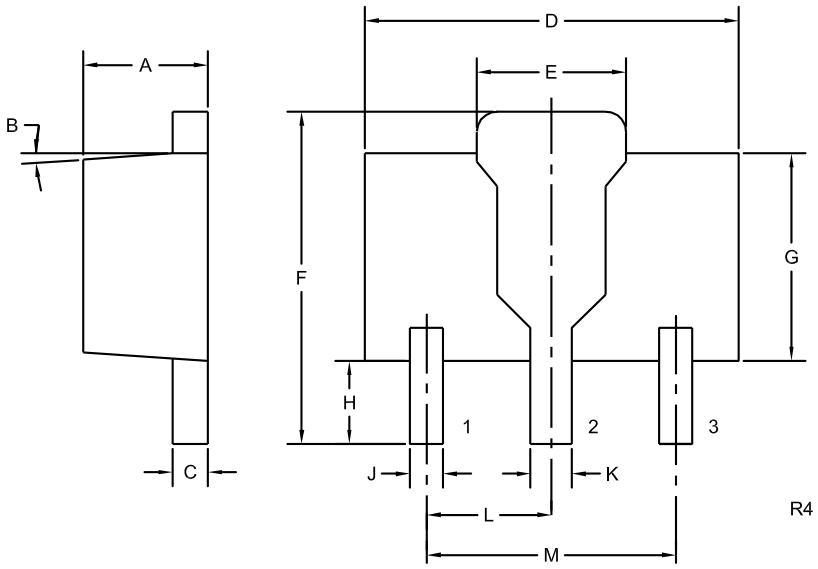
SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=120V			50	nA
I_{CBO}	V_{CB}=120V, T_A=100°C			50	µA
I_{EBO}	V_{EB}=4.0V			50	nA
BV_{CBO}	I_C=100µA	180			V
BV_{CEO}	I_C=1.0mA	160			V
BV_{EBO}	I_E=10µA	6.0			V
$V_{CE(SAT)}$	I_C=10mA, I_B=1.0mA			0.15	V
$V_{CE(SAT)}$	I_C=50mA, I_B=5.0mA			0.20	V
$V_{BE(SAT)}$	I_C=10mA, I_B=1.0mA			1.00	V
$V_{BE(SAT)}$	I_C=50mA, I_B=5.0mA			1.00	V
h_{FE}	V_{CE}=5.0V, I_C=1.0mA	80			
h_{FE}	V_{CE}=5.0V, I_C=10mA	80		250	
h_{FE}	V_{CE}=5.0V, I_C=50mA	30			
h_{FE}	V_{CE}=10V, I_C=1.0A		10		
f_T	V_{CE}=10V, I_C=10mA, f=100MHz	100			MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz			15	pF

R1 (23-February 2010)

CXT5551HC

SURFACE MOUNT
HIGH CURRENT
NPN SILICON TRANSISTOR

SOT-89 CASE - MECHANICAL OUTLINE



(Bottom View)

LEAD CODE:
1) Emitter
2) Collector
3) Base

MARKING:
FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

R1 (23-February 2010)

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 quick ship samples (2nd 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