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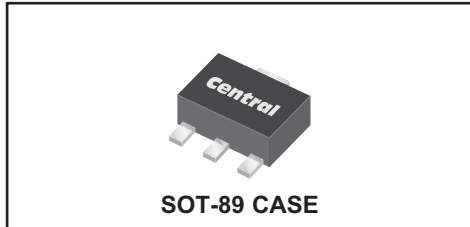
[Central Semiconductor Corp](#)

[CXT2222A TR](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

CXT2222A
SURFACE MOUNT
NPN SILICON TRANSISTOR



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXT2222A type is an NPN silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for small signal general purpose and switching applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V _{CBO}	75
V _{CEO}	40
V _{EBO}	6.0
I _C	600
P _D	1.2
T _J , T _{stg}	-65 to +150
θ _{JA}	104

UNITS

V
V
V
mA
W
°C
°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =60V		10	nA
I _{CBO}	V _{CB} =60V, T _A =125°C		10	μA
I _{CEV}	V _{CE} =60V, V _{EB} =3.0V		10	nA
I _{EBO}	V _{EB} =3.0V		10	nA
BV _{CBO}	I _C =10μA	75		V
BV _{CEO}	I _C =10mA	40		V
BV _{EBO}	I _E =10μA	6.0		V
V _{CE(SAT)}	I _C =150mA, I _B =15mA		0.3	V
V _{CE(SAT)}	I _C =500mA, I _B =50mA		1.0	V
V _{BE(SAT)}	I _C =150mA, I _B =15mA	0.6	1.2	V
V _{BE(SAT)}	I _C =500mA, I _B =50mA		2.0	V
h _{FE}	V _{CE} =10V, I _C =0.1mA	35		
h _{FE}	V _{CE} =10V, I _C =1.0mA	50		
h _{FE}	V _{CE} =10V, I _C =10mA	75		
h _{FE}	V _{CE} =10V, I _C =150mA	100	300	
h _{FE}	V _{CE} =1.0V, I _C =150mA	50		
h _{FE}	V _{CE} =10V, I _C =500mA	40		
f _T	V _{CE} =20V, I _C =20mA, f=100MHz	300		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz		8.0	pF
C _{ib}	V _{EB} =0.5V, I _C =0, f=1.0MHz		25	pF

R6 (23-February 2010)

CXT2222A

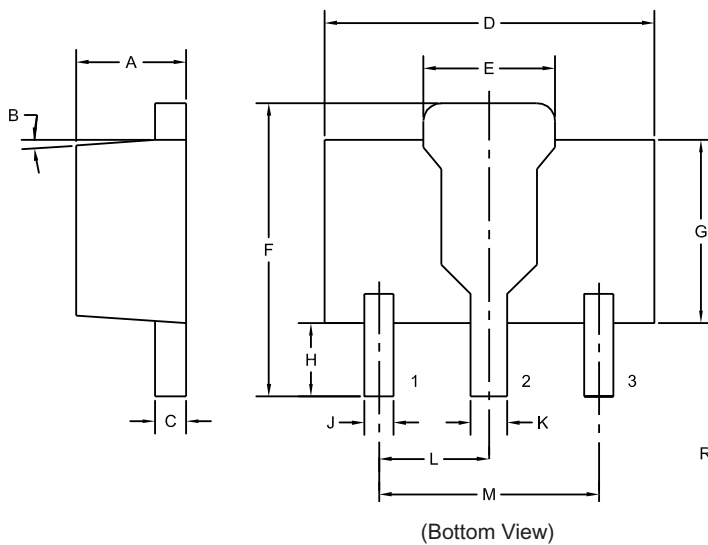
SURFACE MOUNT
NPN SILICON TRANSISTOR



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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
h _{ie}	V _{CE} =10V, I _C =1.0mA, f=1.0kHz	2.0	8.0	kΩ
h _{ie}	V _{CE} =10V, I _C =10mA, f=1.0kHz	0.25	1.25	kΩ
h _{re}	V _{CE} =10V, I _C =1.0mA, f=1.0kHz		8.0	x10 ⁻⁴
h _{re}	V _{CE} =10V, I _C =10mA, f=1.0kHz		4.0	x10 ⁻⁴
h _{fe}	V _{CE} =10V, I _C =1.0mA, f=1.0kHz	50	300	
h _{fe}	V _{CE} =10V, I _C =10mA, f=1.0kHz	75	375	
h _{oe}	V _{CE} =10V, I _C =1.0mA, f=1.0kHz	5.0	35	μS
h _{oe}	V _{CE} =10V, I _C =10mA, f=1.0kHz	25	200	μS
rb'C _c	V _{CB} =10V, I _E =20mA, f=31.8MHz		150	ps
NF	V _{CE} =10V, I _C =100μA, R _S =1.0kΩ, f=1.0kHz		4.0	dB
t _d	V _{CC} =30V, V _{BE} =0.5, I _C =150mA, I _{B1} =15mA		10	ns
t _r	V _{CC} =30V, V _{BE} =0.5, I _C =150mA, I _{B1} =15mA		25	ns
t _s	V _{CC} =30V, I _C =150mA, I _{B1} =I _{B2} =15mA		225	ns
t _f	V _{CC} =30V, I _C =150mA, I _{B1} =I _{B2} =15mA		60	ns

SOT-89 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	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)

R4

LEAD CODE:

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

MARKING:

FULL PART NUMBER

R6 (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

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