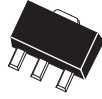


CXT5401
SURFACE MOUNT
PNP SILICON TRANSISTOR



SOT-89 CASE

CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXT5401 type is an PNP silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high voltage amplifier applications.

MARKING CODE: FULL PART NUMBER

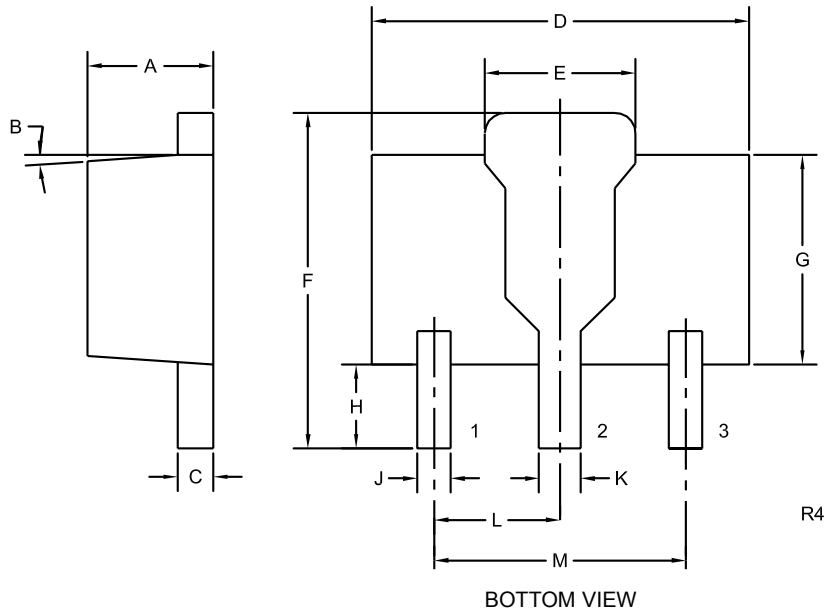
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CB0}	160	V
Collector-Emitter Voltage	V_{CEO}	150	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	500	mA
Power Dissipation	P_D	1.2	W
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	104	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=120\text{V}$		50	nA
I_{CBO}	$V_{CB}=120\text{V}, T_A=100^\circ\text{C}$		50	μA
BV_{CB0}	$I_C=100\mu\text{A}$	160		V
BV_{CEO}	$I_C=1.0\text{mA}$	150		V
BV_{EBO}	$I_E=10\mu\text{A}$	5.0		V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.2	V
$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.5	V
$V_{BE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		1.0	V
$V_{BE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		1.0	V
h_{FE}	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$	50		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	60	240	
h_{FE}	$V_{CE}=5.0\text{V}, I_C=50\text{mA}$	50		
f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	100	300	MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		6.0	pF
h_{fe}	$V_{CE}=10\text{V}, I_C=1.0\text{mA}, f=1.0\text{kHz}$	40	200	
NF	$V_{CE}=5.0\text{V}, I_C=200\mu\text{A}, R_S=10\Omega$ $f=10\text{Hz to } 15.7\text{kHz}$		8.0	dB

SOT-89 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) EMITTER
- 2) COLLECTOR
- 3) BASE

MARKING CODE:

FULL PART NUMBER

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)

R5 (20-May 2004)