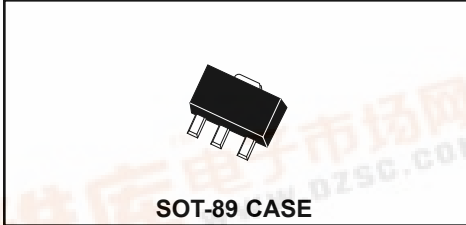


CXT2907A
SURFACE MOUNT
PNP SILICON TRANSISTOR



CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXT2907A type is an PNP silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for small signal general purpose and switching applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V _{CB0}	60	V
Collector-Emitter Voltage	V _{CEO}	60	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Collector Current	I _C	600	mA
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	MAX	UNITS
I _{CBO}	V _{CB} =50V		10	nA
I _{CBO}	V _{CB} =50V, T _A =125°C		10	µA
I _{CEV}	V _{CE} =30V, V _{BE} =0.5V		50	nA
BV _{CB0}	I _C =10mA	60		V
BV _{CEO}	I _C =10mA	60		V
BV _{EBO}	I _E =10mA	5.0		V
V _{CE(SAT)}	I _C =150mA, I _B =15mA		0.4	V
V _{CE(SAT)}	I _C =500mA, I _B =50mA		1.6	V
V _{BE(SAT)}	I _C =150mA, I _B =15mA		1.3	V
V _{BE(SAT)}	I _C =500mA, I _B =50mA		2.6	V
h _{FE}	V _{CE} =10V, I _C =0.1mA	75		
h _{FE}	V _{CE} =10V, I _C =1.0mA	100		
h _{FE}	V _{CE} =10V, I _C =10mA	100		
h _{FE}	V _{CE} =10V, I _C =150mA	100	300	

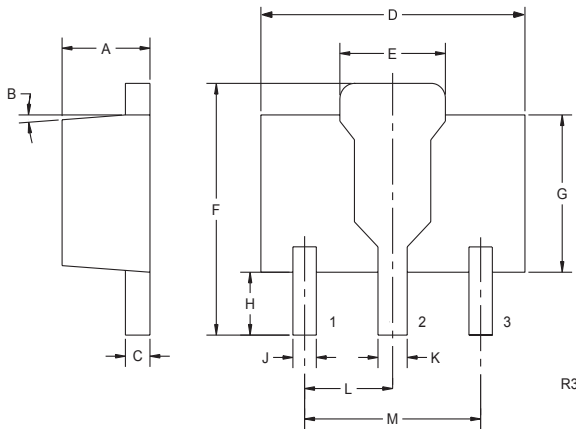
R3 (19-December 2001)

**SURFACE MOUNT
PNP SILICON TRANSISTOR**

ELECTRICAL CHARACTERISTICS (Continued)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
h_{FE}	$V_{CE}=10V, I_C=500mA$	50		
f_T	$V_{CE}=20V, I_C=50mA, f=100MHz$	200		MHz
C_{ob}	$V_{CB}=10V, I_E=0, f=1.0MHz$		8.0	pF
C_{ib}	$V_{BE}=2.0V, I_C=0, f=1.0MHz$		30	pF
t_{on}	$V_{CC}=30V, V_{BE}=0.5, I_C=150mA, I_{B1}=15mA$		45	ns
t_d	$V_{CC}=30V, V_{BE}=0.5, I_C=150mA, I_{B1}=15mA$		10	ns
t_r	$V_{CC}=30V, V_{BE}=0.5, I_C=150mA, I_{B1}=15mA$		40	ns
t_{off}	$V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA$		100	ns
t_s	$V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA$		80	ns
t_f	$V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA$		30	ns

SOT-89 CASE - MECHANICAL OUTLINE



BOTTOM VIEW

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.067	1.40	1.70
B	4°		4°	
C	0.016	0.018	0.40	0.46
D	0.173	0.185	4.40	4.70
E	0.070	0.074	1.79	1.87
F	0.146	0.177	3.70	4.50
G	0.094	0.106	2.40	2.70
H	0.028	0.051	0.70	1.30
J	0.015	0.019	0.38	0.48
K	0.019	0.023	0.48	0.58
L	0.059		1.50	
M	0.118		3.00	

SOT-89 (REV: R3)

LEAD CODE:

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