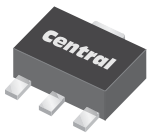
CXT3410 NPN
CXT7410 PNP

SURFACE MOUNT
COMPLEMENTARY LOW $V_{CE(SAT)}$
SILICON TRANSISTORS



SOT-89 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CXT3410 and CXT7410 are Low $V_{CE(SAT)}$ NPN and PNP silicon transistors packaged in the SOT-89 case. High collector current coupled with a low saturation voltage make this an ideal choice for industrial/consumer applications where operational efficiency and size are high priority.

MARKING CODE: FULL PART NUMBER

FEATURES:

- $V_{CE(SAT)}$=275mV TYP @ I_C=1.0A
- High Current (1.0A MAX)
- Low Voltage (40V MAX)
- SOT-89 Surface Mount Package

APPLICATIONS:

- Power Management and DC - DC Converters
- Portable and Battery Powered Products
- Cellular and Cordless Phones
- PDAs, Computers, Digital Cameras
- Disk and Tape Drives

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Continuous Collector Current	I_C	1.0	A
Peak Collector Current	I_{CM}	1.5	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)

			NPN	PNP		
SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**TYP**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=40V				100	nA
I_{EBO}	V_{EB}=6.0V				100	nA
BV_{CBO}	I_C=100µA	40				V
BV_{CEO}	I_C=10mA	25				V
BV_{EBO}	I_E=100µA	6.0				V
$V_{CE(SAT)}$	I_C=50mA, I_B=5.0mA		25	30	50	mV
$V_{CE(SAT)}$	I_C=100mA, I_B=10mA		40	50	75	mV
$V_{CE(SAT)}$	I_C=200mA, I_B=20mA		80	95	150	mV
$V_{CE(SAT)}$	I_C=500mA, I_B=50mA		190	205	250	mV
$V_{CE(SAT)}$	I_C=800mA, I_B=80mA		290	320	400	mV
$V_{CE(SAT)}$	I_C=1.0A, I_B=100mA		360	400	450	mV

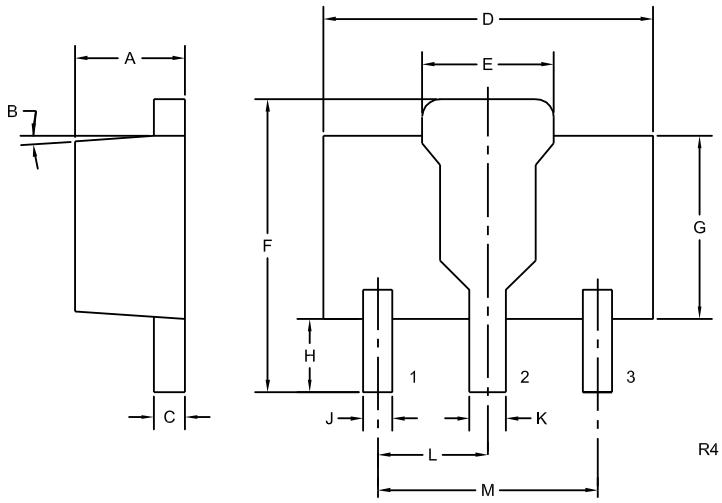
CXT3410 NPN
CXT7410 PNP

SURFACE MOUNT
COMPLEMENTARY LOW $V_{CE(SAT)}$
SILICON TRANSISTORS

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

			NPN	PNP		
SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**TYP**	**MAX**	**UNITS**
$V_{BE(SAT)}$	I_C=800mA, I_B=80mA				1.1	V
$V_{BE(ON)}$	V_{CE}=1.0V, I_C=10mA				0.9	V
h_{FE}	V_{CE}=1.0V, I_C=10mA	100				
h_{FE}	V_{CE}=1.0V, I_C=100mA	100			300	
h_{FE}	V_{CE}=1.0V, I_C=500mA	100				
h_{FE}	V_{CE}=1.0V, I_C=1.0A	50				
f_T	V_{CE}=10V, I_C=50mA, f=100MHz	100				MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz (CXT3410)		6.0		10	pF
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz (CXT7410)			10	15	pF

SOT-89 CASE - MECHANICAL OUTLINE



(Bottom View)

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)

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

MARKING:
FULL PART NUMBER