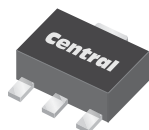


CXT3410 NPN  
CXT7410 PNP

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



**SOT-89 CASE**



[www.centrasemi.com](http://www.centrasemi.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**

**APPLICATIONS:**

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

**FEATURES:**

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

**MAXIMUM RATINGS:** ( $T_A$ =25°C)

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

**SYMBOL**

$V_{CBO}$	40	V
$V_{CEO}$	25	V
$V_{EBO}$	6.0	V
$I_C$	1.0	A
$I_{CM}$	1.5	A
$P_D$	1.2	W
$T_J, T_{stg}$	-65 to +150	°C
$\Theta_{JA}$	104	°C/W

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

SYMBOL	TEST CONDITIONS	CXT3410			CXT7410		UNITS
		MIN	TYP	TYP	MAX		
$I_{CBO}$	$V_{CB}=40V$					100	nA
$I_{EBO}$	$V_{EB}=6.0V$					100	nA
$BV_{CBO}$	$I_C=100\mu A$	40					V
$BV_{CEO}$	$I_C=10mA$	25					V
$BV_{EBO}$	$I_E=100\mu A$	6.0					V
$V_{CE(SAT)}$	$I_C=50mA, I_B=5.0mA$		20	25	50		mV
$V_{CE(SAT)}$	$I_C=100mA, I_B=10mA$		35	40	75		mV
$V_{CE(SAT)}$	$I_C=200mA, I_B=20mA$		75	80	150		mV
$V_{CE(SAT)}$	$I_C=500mA, I_B=50mA$		130	150	250		mV
$V_{CE(SAT)}$	$I_C=800mA, I_B=80mA$		200	220	400		mV
$V_{CE(SAT)}$	$I_C=1.0A, I_B=100mA$		250	275	450		mV

R1 (23-February 2010)

**CXT3410 NPN  
CXT7410 PNP**

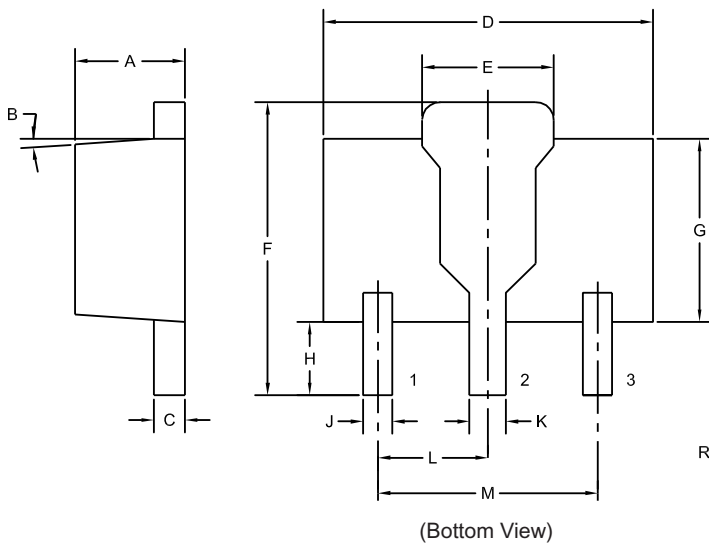
**SURFACE MOUNT  
COMPLEMENTARY LOW  $V_{CE(SAT)}$   
SILICON TRANSISTORS**



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

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

**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**

R1 (23-February 2010)