CXT3410 NPN
CXT7410 PNP

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



SOT-89 CASE

Central™
Semiconductor Corp.

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 CODES:
CXT3410: FULL PART NUMBER
CXT7410: FULL PART NUMBER

FEATURES:
- Low Saturation Voltage
  $V_{CE(SAT)}$ = 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
Collector Current	I_C	1.0	A
Collector Current (Peak)	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)

			CXT3410	CXT7410		
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		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

R0 (24- January 2006)

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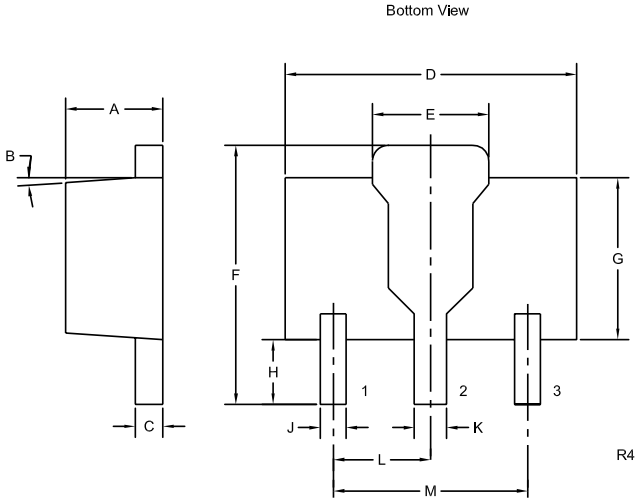
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ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted) Continued.

SYMBOL	TEST CONDITIONS	MIN	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)		10	pF
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz (CXT7410)		15	pF

SOT-89 CASE - MECHANICAL OUTLINE



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

R0 (24- January 2006)