CMST3410 NPN
CMST7410 PNP

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

SUPERmini™

SOT-323 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMST3410, CMST7410 types are complementary silicon transistors manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, designed for battery driven, handheld devices requiring high current and low $V_{CE(SAT)}$ voltages.

MARKING CODES: CMST3410: C03
CMST7410: C07

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	275	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	455	°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
$V_{BE(SAT)}$	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 (CMST3410)		6.0		10	pF
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz (CMST7410)			10	15	pF

R2 (1-August 2011)

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SURFACE MOUNT
COMPLEMENTARY LOW $V_{CE(SAT)}$
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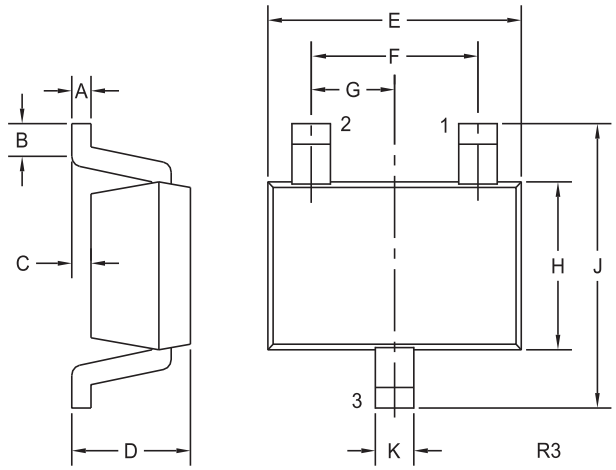
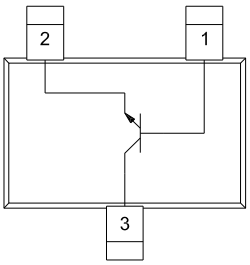
SOT-323 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.002	0.008	0.05	0.20
B	0.004	-	0.10	-
C	-	0.004	-	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.045	0.053	1.15	1.35
J	0.079	0.087	2.00	2.20
K	0.008	0.016	0.20	0.40

SOT-323 (REV: R3)

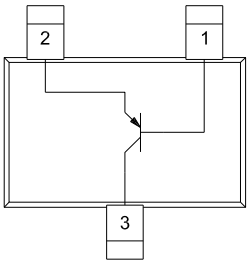
PIN CONFIGURATIONS



CMST3410 NPN

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

MARKING CODE: C03



CMST7410 PNP

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

MARKING CODE: C07