CMST3410 NPN
CMST7410 PNP

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

SUPERmini™

SOT-323 CASE

Central™
Semiconductor Corp.

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
Collector Current	I_C	1.0	A
Collector Current (Peak)	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)

			CMST3410	CMST7410		
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
$V_{BE(SAT)}$	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)				10	pF
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz (CMST7410)				15	pF

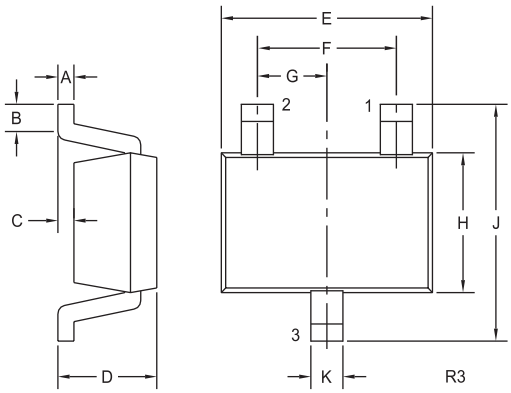
R0 (5-April 2005)

Central™
Semiconductor Corp.

CMST3410 NPN
CMST7410 PNP

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

SOT-323 CASE - MECHANICAL OUTLINE



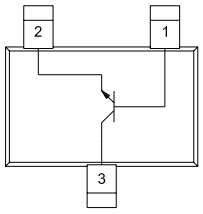
DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.002	0.008	0.05	0.20
B	0.004	-	0.10	-
C	-	0.004	-	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.045	0.053	1.15	1.35
J	0.079	0.087	2.00	2.20
K	0.008	0.016	0.20	0.40

SOT-323 (REV: R3)

LEAD CODE:
1) BASE
2) EMITTER
3) COLLECTOR

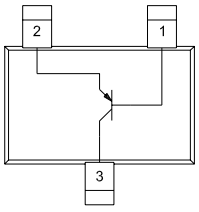
MARKING CODES:
CMST3410: C03
CMST7410: C07

CMST3410 NPN



LEAD CODE:
1) BASE
2) EMITTER
3) COLLECTOR

CMST7410 PNP



R0 (5-April 2005)