

CMPT7410

**SURFACE MOUNT  
LOW  $V_{CE(SAT)}$   
PNP SILICON TRANSISTOR**

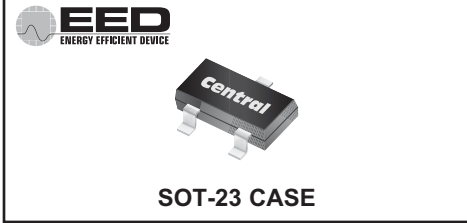


[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPT7410 type is a PNP Low  $V_{CE(SAT)}$  silicon transistor manufactured by the epitaxial planar process and epoxy molded in an SOT-23 surface mount package. This device is designed for battery driven, handheld devices requiring high current and Low  $V_{CE(SAT)}$ .

**MARKING CODE: C741**



**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

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  
 $V_{CEO}$  25  
 $V_{EBO}$  6.0  
 $I_C$  1.0  
 $I_{CM}$  1.5  
 $P_D$  350  
 $T_J, T_{stg}$  -65 to +150  
 $\theta_{JA}$  357

**UNITS**

V  
V  
V  
A  
A  
mW  
 $^\circ\text{C}$   
 $^\circ\text{C/W}$

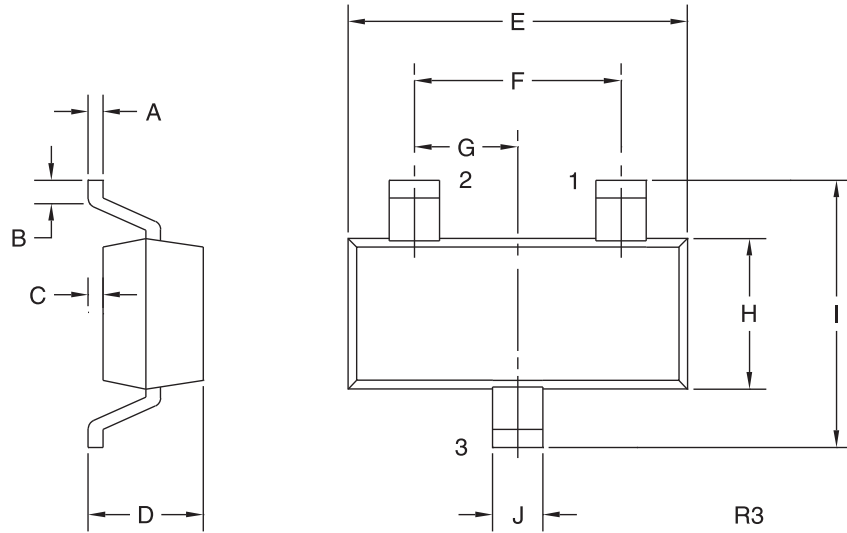
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{CBO}$	$V_{CB}=40\text{V}$			100	nA
$I_{EBO}$	$V_{EB}=6.0\text{V}$			100	nA
$BV_{CBO}$	$I_C=100\mu\text{A}$	40			V
$BV_{CEO}$	$I_C=10\text{mA}$	25			V
$BV_{EBO}$	$I_E=100\mu\text{A}$	6.0			V
$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		30	50	mV
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		50	75	mV
$V_{CE(SAT)}$	$I_C=200\text{mA}, I_B=20\text{mA}$		95	150	mV
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		205	250	mV
$V_{CE(SAT)}$	$I_C=800\text{mA}, I_B=80\text{mA}$		320	400	mV
$V_{CE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$		400	450	mV
$V_{BE(SAT)}$	$I_C=800\text{mA}, I_B=80\text{mA}$			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
$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		10	15	pF

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**PNP SILICON TRANSISTOR**



**SOT-23 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Base
- 2) Emitter
- 3) Collector

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<b>DIMENSIONS</b>				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

R2 (1-August 2011)