

CMLT3410 NPN  
 CMLT7410 PNP  
 CMLT3474 NPN/PNP

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

**PICOmini™**



**SOT-563 CASE**



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

**DESCRIPTION:**

These CENTRAL SEMICONDUCTOR dual devices are low  $V_{CE(SAT)}$  silicon transistors in a PICOmini™ surface mount package designed for small signal general purpose amplifier and switching applications requiring low collector emitter saturation voltage.

**MARKING CODES: CMLT3410: C34  
 CMLT7410: C74  
 CMLT3474: C37**

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

SYMBOL	TEST CONDITIONS	MIN	NPN		PNP		MAX	UNITS
				TYP	TYP			
$I_{CBO}$	$V_{CB}=40\text{V}$					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	
$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		25	30		50	mV	
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		40	50		75	mV	
$V_{CE(SAT)}$	$I_C=200\text{mA}, I_B=20\text{mA}$		80	95		150	mV	
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		190	205		250	mV	
$V_{CE(SAT)}$	$I_C=800\text{mA}, I_B=80\text{mA}$		290	320		400	mV	
$V_{CE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$		360	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	
$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$ (CMLT3410)		6.0			10	pF	
$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$ (CMLT7410)			10		15	pF	

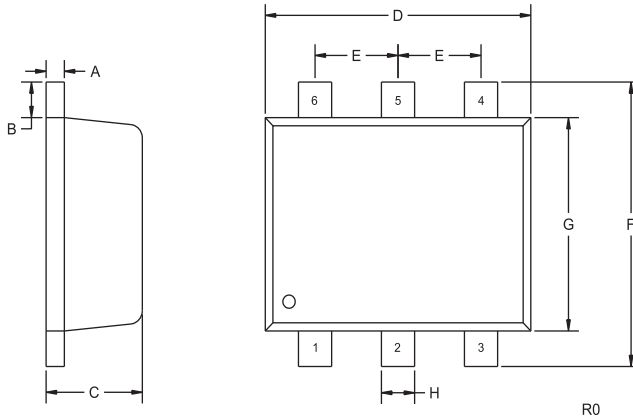
R3 (1-August 2011)

CMLT3410 NPN  
 CMLT7410 PNP  
 CMLT3474 NPN/PNP



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

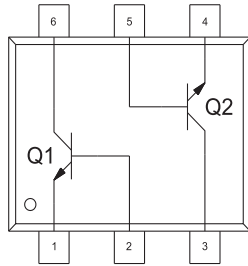
**SOT-563 CASE - MECHANICAL OUTLINE**



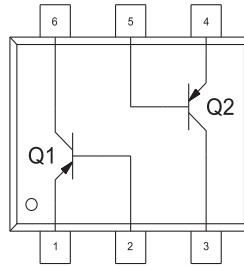
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.10	0.18
B	0.008		0.20	
C	0.022	0.024	0.56	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.061	0.067	1.55	1.70
G	0.047		1.20	
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R0)

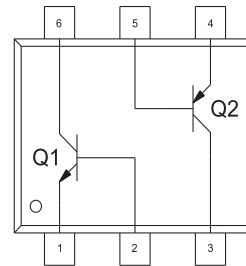
**PIN CONFIGURATIONS**



**MARKING CODE:**  
**CMLT3410: C34**



**MARKING CODE:**  
**CMLT7410: C74**



**MARKING CODE:**  
**CMLT3474: C37**

- LEAD CODE:**
- 1) Emitter Q1
  - 2) Base Q1
  - 3) Collector Q2
  - 4) Emitter Q2
  - 5) Base Q2
  - 6) Collector Q1

R3 (1-August 2011)