

CMLT3410 NPN



www.centralsemi.com

# DESCRIPTION:

These CENTRAL SEMICONDUCTOR dual devices are low V<sub>CE(SAT)</sub> silicon transistors in an SOT-563 surface mount package designed for small signal general purpose amplifier and switching applications requiring low collector emitter saturation voltage.

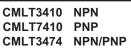
MARKING CODES:	CMLT3410: C34
	CMLT7410: C74
	CMLT3474: C37

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Collector-Base Voltage	V <sub>CBO</sub>	40	V
Collector-Emitter Voltage	VCEO	25	V
Emitter-Base Voltage	V <sub>EBO</sub>	6.0	V
Continuous Collector Current	۱ <sub>C</sub>	1.0	А
Peak Collector Current	ICM	1.5	А
Power Dissipation	PD	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{JA}$	357	°C/W

#### ELECTRICAL CHARACTERISTICS PER TRANSISTOR: (TA=25°C unless otherwise noted)

			NPN	PNP		
SYMBOL	TEST CONDITIONS	MIN	TYP	TYP	MAX	UNITS
ICBO	V <sub>CB</sub> =40V				100	nA
IEBO	V <sub>EB</sub> =6.0V				100	nA
BVCBO	Ι <sub>C</sub> =100μΑ	40				V
BVCEO	I <sub>C</sub> =10mA	25				V
BVEBO	I <sub>E</sub> =100μA	6.0				V
V <sub>CE</sub> (SAT)	I <sub>C</sub> =50mA, I <sub>B</sub> =5.0mA		25	30	50	mV
VCE(SAT)	I <sub>C</sub> =100mA, I <sub>B</sub> =10mA		40	50	75	mV
VCE(SAT)	I <sub>C</sub> =200mA, I <sub>B</sub> =20mA		80	95	150	mV
VCE(SAT)	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		190	205	250	mV
V <sub>CE</sub> (SAT)	I <sub>C</sub> =800mA, I <sub>B</sub> =80mA		290	320	400	mV
V <sub>CE</sub> (SAT)	I <sub>C</sub> =1.0A, I <sub>B</sub> =100mA		360	400	450	mV
V <sub>BE(SAT)</sub>	I <sub>C</sub> =800mA, I <sub>B</sub> =80mA				1.1	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =10mA				0.9	V
h <sub>FE</sub> `´	V <sub>CE</sub> =1.0V, I <sub>C</sub> =10mA	100				
hFE	V <sub>CE</sub> =1.0V, I <sub>C</sub> =100mA	100			300	
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =500mA	100				
h <sub>FE</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =1.0A	50				
fT	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA, f=100MHz	100				MHz
Cob	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1.0MHz (CMLT3410)		6.0		10	pF
C <sub>ob</sub>	$V_{CB}$ =10V, I <sub>E</sub> =0, f=1.0MHz (CMLT7410)			10	15	pF

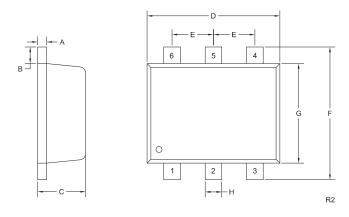
R5 (29-June 2015)





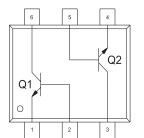
SURFACE MOUNT SILICON DUAL, LOW V<sub>CE</sub>(SAT) TRANSISTORS

# SOT-563 CASE - MECHANICAL OUTLINE

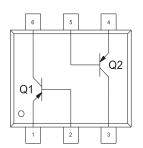


DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.0027	0.007	0.07	0.18
В	0.008		0.20	
С	0.017	0.024	0.45	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.059	0.067	1.50	1.70
G	0.043	0.051	1.10	1.30
Н	0.006	0.012	0.15	0.30
SOT-563 (REV: R2)				

#### **PIN CONFIGURATIONS**



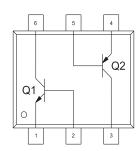
MARKING CODE: CMLT3410: C34



MARKING CODE: CMLT7410: C74

### LEAD CODE:

- 1) Emitter Q1
  2) Base Q1
  3) Collector Q2
  4) Emitter Q2
- 5) Base Q2
- 6) Collector Q1



MARKING CODE: CMLT3474: C37

R5 (29-June 2015)

www.centralsemi.com

# **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**

#### **PRODUCT SUPPORT**

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- · Consolidated shipping options

#### **DESIGNER SUPPORT/SERVICES**

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities

ss your design challenges.

· Custom product packing

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

Custom product and package development

## **REQUESTING PRODUCT PLATING**

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

## CONTACT US

## **Corporate Headquarters & Customer Support Team**

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA Main Tel: (631) 435-1110 Main Fax: (631) 435-1824 Support Team Fax: (631) 435-3388 www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors: www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <u>www.centralsemi.com/terms</u>





# Product End of Life Notification

PDN ID:	PDN01237 Rev:001
Notification Date:	12/21/22
Last Buy Date:	N/A
Last Shipment Date	N/A

Summary: The following items are discontinued and now considered End of Life (EOL). Rev:001 of PDN#01037, Dec 21, 2022, issued to remove CMLT3474 BK and CMLT3474 TR to address market demand; CMLT3474 BK and CMLT3474 TR are now active devices.

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Portfolio Management. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

## \* All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.

Central Part Number Suggested Replacement	
BCW31 BK N/A	
BCW31 TR N/A	
CMUD2836 BK N/A	
CMUD2836 TR N/A	
CMZ2361 BK N/A	
CMZ2361 TR N/A	
CXDM3069N BK N/A	
CXDM3069N TR N/A	
CMLT3474 BK Item CMLT3474 BK removed from PDN; device now active.	
CMLT3474 TR Item CMLT3474 TR removed from PDN; device now active.	

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit https://my.centralsemi.com/submit-inquiry?type=ER to submit an online inquiry.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.