# **CMXT2907A**

# SURFACE MOUNT DUAL PNP SILICON TRANSISTORS



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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMXT2907A type is a dual PNP silicon transistor manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, and designed for small signal general purpose and switching applications.

**MARKING CODE: X2F** 



MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Collector-Base Voltage	VCBO	60	V
Collector-Emitter Voltage	VCEO	60	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	V
Continuous Collector Current	ĪC	600	mA
Power Dissipation	$P_{D}$	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

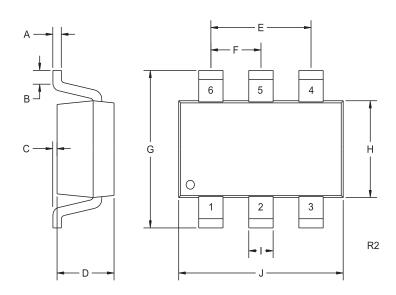
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =50V		10	nA
ICBO	V <sub>CB</sub> =50V, T <sub>A</sub> =125°C		10	μΑ
ICEV	V <sub>CE</sub> =30V, V <sub>BE</sub> =0.5V		50	nA
BV <sub>CBO</sub>	I <sub>C</sub> =10μA	60		V
BVCEO	I <sub>C</sub> =10mA	60		V
BVEBO	I <sub>E</sub> =10μA	5.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.4	V
VCE(SAT)	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		1.6	V
VBE(SAT)	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		1.3	V
V <sub>BE</sub> (SAT)	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		2.6	V
h <sub>FE</sub> ` ′	V <sub>CE</sub> =10V, I <sub>C</sub> =0.1mA	75		
hFE	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0mA	100		
h <sub>FE</sub>	$V_{CE}=10V$ , $I_{C}=10mA$	100		
h <sub>FE</sub>	$V_{CE}$ =10V, $I_{C}$ =150mA	100	300	
hFE	V <sub>CE</sub> =10V, I <sub>C</sub> =500mA	50		
f <sub>T</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> =50mA, f=100MHz	200		MHz
C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1.0MHz		8.0	pF
C <sub>ib</sub>	V <sub>BE</sub> =2.0V, I <sub>C</sub> =0, f=1.0MHz		30	pF
ton	V <sub>CC</sub> =30V, V <sub>BE</sub> =0.5V, I <sub>C</sub> =150mA, I <sub>B1</sub> =15mA	45	ns	
t <sub>d</sub>	V <sub>CC</sub> =30V, V <sub>BE</sub> =0.5V, I <sub>C</sub> =150mA, I <sub>B1</sub> =15mA	10	ns	
t <sub>r</sub>	V <sub>CC</sub> =30V, V <sub>BE</sub> =0.5V, I <sub>C</sub> =150mA, I <sub>B1</sub> =15mA	40	ns	
t <sub>off</sub>	V <sub>CC</sub> =6.0V, I <sub>C</sub> =150mA, I <sub>B1</sub> =I <sub>B2</sub> =15mA		100	ns
ts	V <sub>CC</sub> =6.0V, I <sub>C</sub> =150mA, I <sub>B1</sub> =I <sub>B2</sub> =15mA		80	ns
tf	V <sub>CC</sub> =6.0V, I <sub>C</sub> =150mA, I <sub>B1</sub> =I <sub>B2</sub> =15mA		30	ns

# **CMXT2907A**

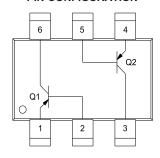
# **SURFACE MOUNT DUAL PNP SILICON TRANSISTORS**



# **SOT-26 CASE - MECHANICAL OUTLINE**



# **PIN CONFIGURATION**



DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
Α	0.004	0.007	0.11	0.19	
В	0.016	-	0.40	-	
С	-	0.004	-	0.10	
D	0.039	0.047	1.00	1.20	
E	0.074	0.075	1.88	1.92	
F	0.037	0.038	0.93	0.97	
G	0.102	0.118	2.60	3.00	
Н	0.059	0.067	1.50	1.70	
	0.016		0.41		
J	0.110	0.118	2.80	3.00	

SOT-26 (REV: R2)

# LEAD CODE:

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

**MARKING CODE: X2F** 

R3 (12-February 2010)

#### **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

- · Custom bar coding for shipments
- · Custom product packing

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

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

- Free guick 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

- · Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- 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).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

#### **CONTACT US**

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# Product End of Life Notification

PDN ID:	PDN01164
Notification Date:	2/05/21
Last Buy Date:	8/05/21
Last Shipment Date	2/05/22

Summary: The following devices manufactured in the SOT-26 case are discontinued and now classified as End of Life (EOL).

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 Management Process. 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 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. Please email your requests to engineering@centralsemi.com.

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.

CCC785 REV 002