# MPQ2906 MPQ2907

# PNP SILICON QUAD TRANSISTOR



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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR MPQ2906, MPQ2907 types are comprised of four independent PNP silicon transistors mounted in a 14-pin DIP, designed for small signal, general purpose amplifier and switching applications.

# **MARKING: FULL PART NUMBER**



MAXIMUM RATINGS: (TA=25°C)	SYMBOL		UNITS
Collector-Base Voltage	$V_{CBO}$	60	V
Collector-Emitter Voltage	$V_{CEO}$	40	V
Emitter-Base Voltage	$V_{EBO}$	5.0	V
Continuous Collector Current	$I_{C}$	600	mA
Power Dissipation (per transistor)	$P_{D}$	650	mW
Power Dissipation (total package)	$P_{D}$	2.0	W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>sta</sub>	-65 to +150	°C

FI FCTRICAL	CHARACTERISTICS PER TRANSISTOR: (T <sub>A</sub> =25°C)	
LLLCINICAL	CHARACTERISTICS FER TRANSISTOR. (1A-23 C)	

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
ICBO	V <sub>CB</sub> =30V			50	nA
I <sub>EBO</sub>	V <sub>EB</sub> =3.0V			50	nA
BV <sub>CBO</sub>	I <sub>C</sub> =10μA	60			V
BVCEO	I <sub>C</sub> =10mA	40			V
BVEBO	I <sub>E</sub> =10μA	5.0			V
V <sub>CE</sub> (SAT)	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA			0.4	V
VCE(SAT)	I <sub>C</sub> =300mA, I <sub>B</sub> =30mA			1.6	V
V <sub>BE</sub> (SAT)	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA			1.3	V
V <sub>BE</sub> (SAT)	I <sub>C</sub> =300mA, I <sub>B</sub> =30mA			2.6	V
fT	$V_{CE}$ =20V, $I_{C}$ =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, I <sub>C</sub> =150mA, I <sub>B1</sub> =15mA		30		ns
toff	$V_{CC}$ =6.0V, $I_{C}$ =150mA, $I_{B1}$ = $I_{B2}$ =15mA		150		ns

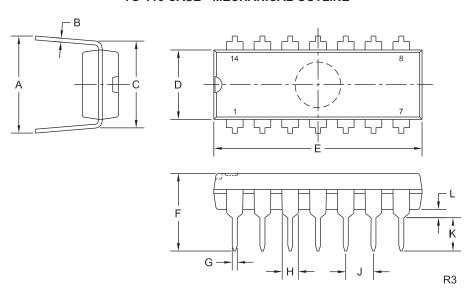
		MPQ2906		MPQ2907	
		MIN	MAX	MIN	MAX
hFE	$V_{CE}$ =10V, $I_{C}$ =10mA	35	-	75	-
hFE	$V_{CE}$ =10V, $I_{C}$ =150mA	40	-	100	-
hFE	$V_{CE}$ =10V, $I_{C}$ =300mA	30	-	50	-

## **MPQ2906 MPQ2907**

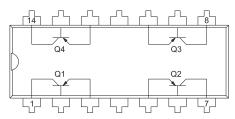
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# **TO-116 CASE - MECHANICAL OUTLINE**



# PIN CONFIGURATION



# LEAD CODE:

1) Collector Q1 2) Base Q1 3) Emitter Q1

8) Collector Q3 9) Base Q3 10) Emitter Q3

4) No Connection 11) No Connection 5) Emitter Q2

12) Emitter Q4

6) Base Q2 7) Collector Q2 13) Base Q4 14) Collector Q4

MARKING:	<b>FULL</b>	PART	NUMBER

DIMENSIONS				
	INC	HES	MILLIM	ETERS
SYMBOL	MIN	MAX	MIN	MAX
А	0.310	0.390	7.9	9.9
В	0.008	0.014	0.2	0.4
С	0.3	310	7	9
D	0.240	0.260	6.1	6.6
E	0.740	0.760	18.8	19.3
F	-	0.300	-	7.6
G	0.014	0.022	0.4	0.6
Н	0.050		1	.3
J	0.100		2	.5
K	0.125	0.150	3.2	3.8
Ĺ	0.015	_	0.4	_

TO-116 (REV: R3)

R1 (30-January 2012)

## **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:	PDN01169
Notification Date:	3/26/21
Last Buy Date:	9/26/21
Last Shipment Date	3/26/22

Summary: The devices below manufactured in the TO-116 case are discontinued and now classified as End of Life (EOL); last time buy orders will be NCNR. Note: MPQ2222, MPQ222A, and MPQ3904 are NOT being discontinued and remain 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 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.

Replacement
N/A

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