

## SILICON NPN QUAD TRANSISTOR

TO-116 CASE



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# DESCRIPTION:

The CENTRAL SEMICONDUCTOR MPQ7043 type is comprised of four independent silicon NPN transistors mounted in a 14-pin DIP, designed for general purpose amplifier and switching applications.

## MARKING: FULL PART NUMBER

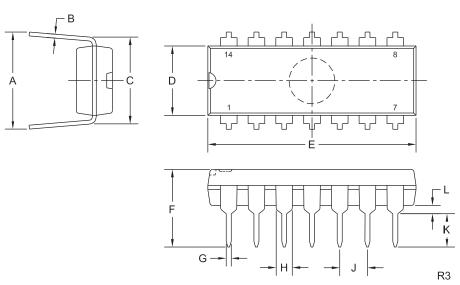
MAXIMUM RATINGS: (T <sub>A</sub> =25°C)		SYMBOL	250			
Collector-Base Voltage		V <sub>CBO</sub>	250	•		
Collector-Emitter Voltage		VCEO	250	V		
Emitter-Base Voltage		V <sub>EBO</sub>	5.0	V		
Continuous Collector Current		۱ <sub>C</sub>	500	mA		
Power Dissipation (per transistor)		PD	1.25	W		
Power Dissipation (total package)		PD	3.2	W		
Operating and Storage Junction Temperature		T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C		
ELECTRICAL CHARACTERISTICS PER TRANSISTOR: (T <sub>A</sub> =25°C)						
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS		
ICBO	V <sub>CB</sub> =180V		100	nA		
BVCBO	I <sub>C</sub> =100μA	250		V		
BVCEO	I <sub>C</sub> =1.0mA	250		V		
BVEBO	Ι <sub>Ε</sub> =100μΑ	5.0		V		
VCE(SAT)	I <sub>C</sub> =20mA, I <sub>B</sub> =2.0mA		0.50	V		
V <sub>BE(SAT)</sub>	I <sub>C</sub> =20mA, I <sub>B</sub> =2.0mA		0.90	V		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0mA	25				
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	40				
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =30mA	40				
f <sub>T</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> =10mA, f=100MHz	50		MHz		
Cob	V <sub>CB</sub> =20V, I <sub>E</sub> =0, f=1.0MHz		5.0	pF		
C <sub>ib</sub>	$V_{EB}$ =3.0V, I <sub>C</sub> =0, f=1.0MHz		50	pF		

R0 (10-March 2014)



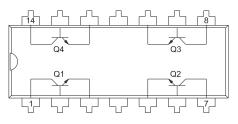
MPQ7043

SILICON NPN QUAD TRANSISTOR



## TO-116 CASE - MECHANICAL OUTLINE

PIN CONFIGURATION



## LEAD CODE:

<ol> <li>Collector Q1</li> </ol>	<ol><li>Collector Q3</li></ol>
2) Base Q1	9) Base Q3
<ol><li>Emitter Q1</li></ol>	10) Emitter Q3
4) No Connection	11) No Connection
5) Emitter Q2	12) Emitter Q4
6) Base Q2	13) Base Q4
7) Collector Q2	14) Collector Q4



DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
А	0.310	0.390	7.9	9.9	
В	0.008	0.014	0.2	0.4	
С	0.310		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	
L	0.015	-	0.4	-	

TO-116 (REV: R3)

R0 (10-March 2014)

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## **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

Special wafer diffusions

· Custom product packing

- 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**

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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.

Central Part Number	Replacement
MPQ2369	N/A
MPQ2483	N/A
MPQ2484	N/A
MPQ2907	N/A
MPQ2907A	N/A
MPQ3467	N/A
MPQ3762	N/A
MPQ3798	N/A
MPQ3799	N/A
MPQ3906	N/A
MPQ6002	N/A
MPQ6100A	N/A
MPQ6502	N/A
MPQ6700	N/A
MPQ7043	N/A
MPQ7053	N/A
MPQ7093	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.