

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

MPQ3725

NPN SILICON QUAD TRANSISTOR

JEDEC TO-116 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPQ3725 type is comprised of four independent silicon transistors mounted in a 14 PIN-DIP case, designed for core driver applications.

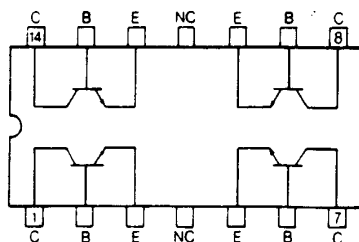
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	SYMBOL		UNIT
Collector-Base Voltage	V_{CES}	60	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	1.0	A
Power Dissipation (each transistor)	P_D	1.0	W
Power Dissipation (total package)	P_D	2.5	W
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CBO}	$V_{CB}=40\text{V}$		500	nA
BV_{CES}	$I_C=100\mu\text{A}$	60		V
BV_{CEO}	$I_C=10\text{mA}$	40		V
BV_{EBO}	$I_E=10\mu\text{A}$	5.0		V
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$	-	0.45	V
$V_{BE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$	0.80	1.0	V
h_{FE}	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$	35	200	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=500\text{mA}$	25	-	
f_T	$V_{CE}=10\text{V}, I_C=50\text{mA}, f=100\text{MHz}$	250		MHz
t_{ON}	$V_{BE(OFF)}=3.8\text{V}, I_C=500\text{mA}, I_{B1}=50\text{mA}$		35	ns
t_{OFF}	$I_C=500\text{mA}, I_{B1}=I_{B2}=50\text{mA}$		60	ns
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		10	pF
C_{ib}	$V_{EB}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$		80	pF

CONNECTION DIAGRAM



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 quick ship samples (2nd 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

Corporate Headquarters & Customer Support Team

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Worldwide Distributors:
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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: www.centrasemi.com/terms

Product End of Life Notification

PDN ID:	PDN01166
Notification Date:	3/11/21
Last Buy Date:	9/11/21
Last Shipment Date	3/11/22

Summary: The CP337V wafer process is 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 Part Number	Replacement
CP337V-2N3725-CT	N/A
CP337V-2N3725-CT20	N/A
CP337V-2N4013-CT20	N/A
MPQ3725	N/A
MPQ3725A	N/A
2N3725	N/A
2N3725A	N/A
2N4013	N/A
2N4014	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@centrasemi.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.