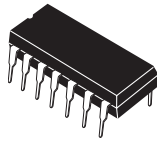


MPQ3725A

**NPN SILICON
QUAD TRANSISTOR**



TO-116 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR MPQ3725A type is comprised of four independant silicon NPN transistors mounted in a 14-Pin DIP case, designed for core driver applications.

MARKING CODE: FULL PART NUMBER

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

Collector-Emitter Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Collector Current
Power Dissipation (each transistor)
Power Dissipation (total package)
Operating and Storage Junction Temperature

SYMBOL

V_{CES}	70
V_{CEO}	50
V_{EBO}	5.0
I_C	1.0
P_D	1.0
P_D	2.5
T_J, T_{stg}	-65 to +150

UNITS

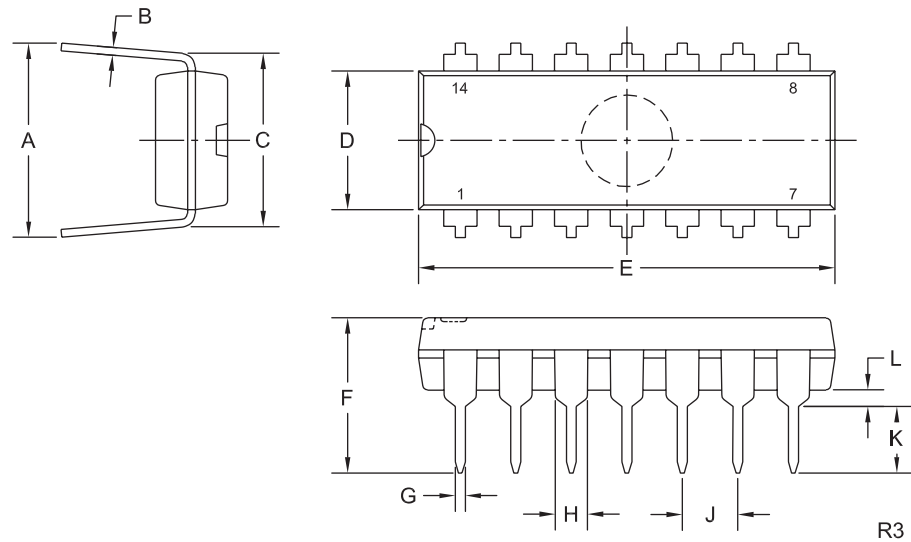
V
V
V
A
W
W
$^{\circ}\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=40\text{V}$		500	nA
BV_{CEO}	$I_C=10\text{mA}$	50		V
BV_{CES}	$I_C=100\mu\text{A}$	70		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
$V_{BE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$	0.8	1.0	V
h_{FE}	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$	40		
h_{FE}	$V_{CE}=2.0\text{V}, I_C=500\text{mA}$	30		
f_T	$V_{CE}=10\text{V}, I_C=50\text{mA}, f=100\text{MHz}$	200		MHz
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

R0 (5-December 2007)

TO-116 CASE - MECHANICAL OUTLINE

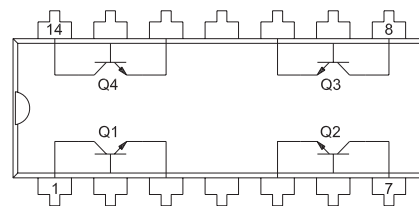


SYMBOL	DIMENSIONS			
	MIN	MAX	MIN	MAX
A	0.310	0.390	7.9	9.9
B	0.008	0.014	0.2	0.4
C	0.310		7.9	
D	0.240	0.260	6.1	6.6
E	0.740	0.760	18.8	19.3
F	-	0.300	-	7.6
G	0.014	0.022	0.4	0.6
H	0.050		1.3	
J	0.100		2.5	
K	0.125	0.150	3.2	3.8
L	0.015	-	0.4	-

TO-116 (REV: R3)

MARKING CODE: FULL PART NUMBER

PIN CONFIGURATION



LEAD CODE:

- | | |
|-----------------|------------------|
| 1) COLLECTOR Q1 | 8) COLLECTOR Q3 |
| 2) BASE Q1 | 9) BASE Q3 |
| 3) EMITTER Q1 | 10) EMITTER Q3 |
| 4) NC | 11) NC |
| 5) EMITTER Q2 | 12) EMITTER Q4 |
| 6) BASE Q2 | 13) BASE Q4 |
| 7) COLLECTOR Q2 | 14) COLLECTOR Q4 |

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

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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

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