

D41D1 D41D7 D41D13  
D41D2 D41D8 D41D14  
D41D4 D41D10  
D41D5 D41D11

**PNP SILICON  
POWER TRANSISTORS**



**TO-202 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR D41D series types are PNP silicon power transistors designed for amplifier and switching applications. The NPN complementary types are the D40D series.

**MARKING: FULL PART NUMBER**

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

Collector-Emitter Voltage  
Collector-Emitter Voltage  
Emitter-Base Voltage  
Continuous Collector Current  
Peak Collector Current  
Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

SYMBOL	D41D1	D41D4	D41D7	D41D10 D41D11	UNITS
	D41D2	D41D5	D41D8	D41D13 D41D14	
$V_{CES}$	45	60	75	90	V
$V_{CEO}$	30	45	60	75	V
$V_{EBO}$		5.0			V
$I_C$		1.0			A
$I_{CM}$		1.5			A
$P_D$		6.25			W
$T_J, T_{stg}$		-65 to +150			$^\circ\text{C}$
$\theta_{JC}$		20			$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS:** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_{CES}$	$V_{CE}=\text{Rated } V_{CES}$		100	nA
$I_{EBO}$	$V_{EB}=5.0\text{V}$		100	nA
$BV_{CEO}$	$I_C=10\text{mA}$ (D41D1, 2)	30		V
$BV_{CEO}$	$I_C=10\text{mA}$ (D41D4, 5)	45		V
$BV_{CEO}$	$I_C=10\text{mA}$ (D41D7, 8)	60		V
$BV_{CEO}$	$I_C=10\text{mA}$ (D41D10, 11, 13, 14)	75		V
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$ (D41D1, 2, 4, 5)		0.5	V
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$ (D41D7, 8, 10, 11, 13, 14)		1.0	V
$V_{BE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		1.5	V

		D41D1 D41D4 D41D7 D41D10 D41D13		D41D2 D41D5 D41D8 D41D11 D41D14	
		MIN	MAX	MIN	MAX
$h_{FE}$	$V_{CE}=2.0\text{V}, I_C=100\text{mA}$	50	150	120	360
$h_{FE}$	$V_{CE}=2.0\text{V}, I_C=1.0\text{A}$ (Except D41D13, 14)	10	-	20	-

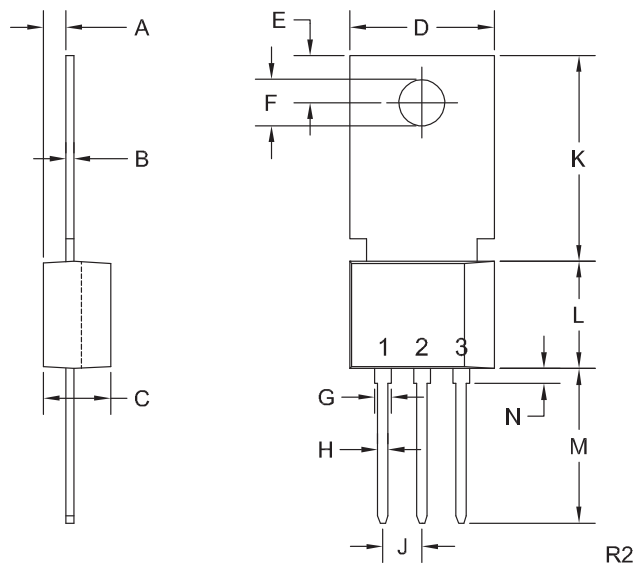
R2 (4-February 2016)

D41D1 D41D7 D41D13  
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D41D5 D41D11

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**TO-202 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Emitter
- 2) Base
- 3) Collector
- Tab is common to pin 3

**MARKING:**

**FULL PART NUMBER**

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.016	0.024	0.40	0.60
C	0.173	0.181	4.40	4.60
D	0.374	0.413	9.50	10.5
E	0.118	0.154	3.00	3.90
F (DIA)	0.124	0.150	3.15	3.80
G	0.035	0.055	0.90	1.40
H	0.023	0.031	0.59	0.80
J	0.094	0.106	2.39	2.69
K	0.459	0.559	11.66	14.21
L	0.280	0.346	7.12	8.80
M	0.406	0.531	10.3	13.5
N	0.024	0.059	0.60	1.50

TO-202 (REV: R2)

R2 (4-February 2016)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### 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
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### 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).

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### 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  
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[www.centrasemi.com](http://www.centrasemi.com)

**Worldwide Field Representatives:**  
[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

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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](http://www.centrasemi.com/terms)



<https://www.centrasemi.com>

## Product End of Life Notification

<b>PDN ID:</b>	PDN01270
<b>Notification Date:</b>	5/30/24
<b>Last Buy Date:</b>	Stock Only
<b>Last Shipment Date</b>	Stock Only

Please be advised that Central Semiconductor must immediately discontinue the product(s) listed in the attached PDN notice. Orders can only be accepted for products with available inventory on hand.

You may have purchased one or more of the products listed. Please do not hesitate to contact your local Central Semiconductor sales representative with any questions or needs you may have. Central regrets any inconvenience this may cause.

Sincerely,

Central Semiconductor, LLC

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DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor 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.



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# Product End of Life Notification

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<b>Notification Date:</b>	5/30/24
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<b>Last Shipment Date</b>	Stock Only

Summary: All devices manufactured in the TO-202 and TO-202-2 packages are discontinued and now classified as End of Life (EOL).

Although Central Semiconductor 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 Portfolio Management. 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.**

<b>Central Part Number</b>	<b>Suggested Replacement</b>
CEN-U01A	N/A
CEN-U02	N/A
CEN-U05	N/A
CEN-U05N	N/A
CEN-U06	N/A
CEN-U06N	N/A
CEN-U07	N/A
CEN-U07 MOD1	N/A
CEN-U07N	N/A
CEN-U10	N/A
CEN-U10N	N/A
CEN-U45	N/A
CEN-U45N	N/A
CEN-U51A	N/A
CEN-U52	N/A
CEN-U55	N/A
CEN-U55N	N/A
CEN-U56	N/A
CEN-U56N	N/A
CEN-U57	N/A
CEN-U57N	N/A
CEN-U60	N/A
CEN1314	N/A
CEN1319	N/A
CEN621	N/A
CEN928	N/A
CEN934	N/A
D40C1	N/A
D40C1N	N/A
D40C2	N/A
D40C4	N/A
D40C4N	N/A
D40C5	N/A
D40C7	N/A
D40C8	N/A

\*\*\* CONTINUED \*\*\*

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\*\*\* CONTINUED FROM PRIOR PAGE \*\*\*

\* All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.

<b>Central Part Number</b>	<b>Suggested Replacement</b>
D40D1	N/A
D40D10	N/A
D40D11	N/A
D40D13	N/A
D40D2	N/A
D40D4	N/A
D40D5	N/A
D40D7	N/A
D40D8	N/A
D40E1	N/A
D40E5	N/A
D40E7	N/A
D40K1	N/A
D40K2	N/A
D40K3	N/A
D40K4	N/A
D41D1	N/A
D41D10	N/A
D41D11	N/A
D41D2	N/A
D41D4	N/A
D41D5	N/A
D41D5 MOD	N/A
D41D7	N/A
D41D8	N/A
D41E1	N/A
D41E5	N/A
D41E7	N/A
D41E7N	N/A
2N6548	N/A
2N6549	N/A
2N6551	N/A
2N6552	N/A
2N6553	N/A
2N6554	N/A
2N6554-N	N/A
2N6555	N/A
2N6556	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. If you would like assistance, please visit <https://my.centalsemi.com/submit-inquiry?type=ER> to submit an online inquiry.

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