

D41D1 D41D7 D41D13  
D41D2 D41D8 D41D14  
D41D4 D41D10  
D41D5 D41D11

**PNP SILICON  
POWER TRANSISTORS**



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**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 <sub>C</sub> =25°C)	SYMBOL	D41D1	D41D4	D41D7	D41D10	UNITS
		D41D2	D41D5	D41D8	D41D11 D41D13 D41D14	
Collector-Emitter Voltage	V <sub>CES</sub>	45	60	75	90	V
Collector-Emitter Voltage	V <sub>CEO</sub>	30	45	60	75	V
Emitter-Base Voltage	V <sub>EBO</sub>		5.0			V
Continuous Collector Current	I <sub>C</sub>		1.0			A
Peak Collector Current	I <sub>CM</sub>		1.5			A
Power Dissipation	P <sub>D</sub>		6.25			W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>		-65 to +150			°C
Thermal Resistance	θ <sub>JC</sub>		20			°C/W

**ELECTRICAL CHARACTERISTICS: (T<sub>C</sub>=25°C unless otherwise noted)**

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CES</sub>	V <sub>CE</sub> =Rated V <sub>CES</sub>		100	nA
I <sub>EBO</sub>	V <sub>EB</sub> =5.0V		100	nA
BV <sub>CEO</sub>	I <sub>C</sub> =10mA (D41D1, 2)	30		V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA (D41D4, 5)	45		V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA (D41D7, 8)	60		V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA (D41D10, 11, 13, 14)	75		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA (D41D1, 2, 4, 5)		0.5	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA (D41D7, 8, 10, 11, 13, 14)		1.0	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		1.5	V

	TEST CONDITIONS	D41D1 D41D4 D41D7 D41D10 D41D13		D41D2 D41D5 D41D8 D41D11 D41D14	
		MIN	MAX	MIN	MAX
h <sub>FE</sub>	V <sub>CE</sub> =2.0V, I <sub>C</sub> =100mA	50	150	120	300
h <sub>FE</sub>	V <sub>CE</sub> =2.0V, I <sub>C</sub> =1.0A (Except D41D13, 14)	10	-	20	-

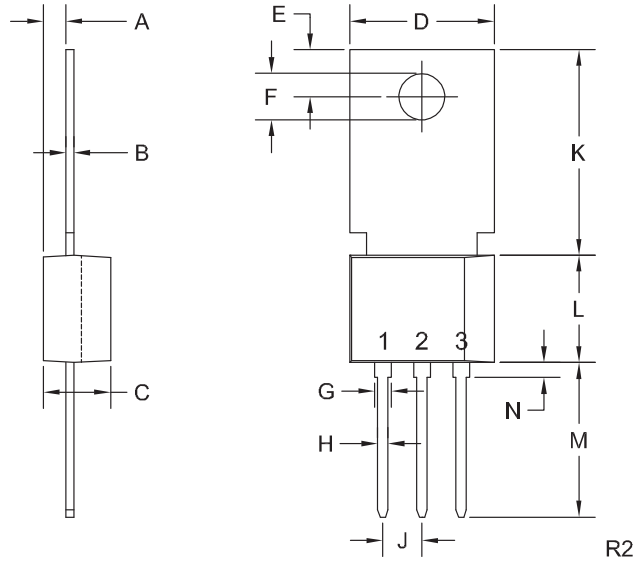
R2 (4-February 2016)

D41D1 D41D7 D41D13  
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PNP SILICON  
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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

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

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