

D41D1 D41D7 D41D13
D41D2 D41D8 D41D14
D41D4 D41D10
D41D5 D41D11

**PNP SILICON
POWER TRANSISTORS**



TO-202 CASE



www.centra-semi.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 D41D13	UNITS
	D41D2	D41D5	D41D8	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			$^{\circ}\text{C}$
θ_{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	-

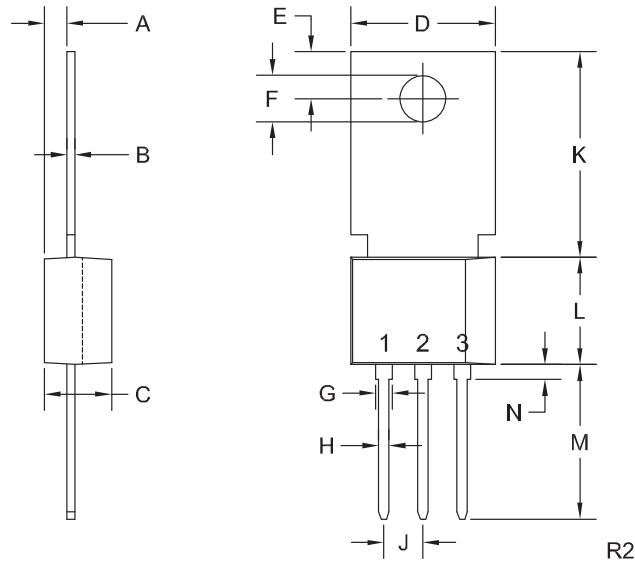
R2 (4-February 2016)

D41D1 D41D7 D41D13
D41D2 D41D8 D41D14
D41D4 D41D10
D41D5 D41D11

PNP SILICON
POWER TRANSISTORS



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)

www.centrasemi.com

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

Worldwide Distributors:
www.centrasemi.com/wwdistributors

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