

D41D1 D41D7 D41D13
D41D2 D41D8 D41D14
D41D4 D41D10
D41D5 D41D11

**PNP SILICON
POWER TRANSISTOR**



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	MIN	MAX
h_{FE}	$V_{CE}=2.0\text{V}, I_C=100\text{mA}$	50	150	120	300	120	360
h_{FE}	$V_{CE}=2.0\text{V}, I_C=1.0\text{A}$ (Except D40D13, 14)	10	-	20	-	10	-

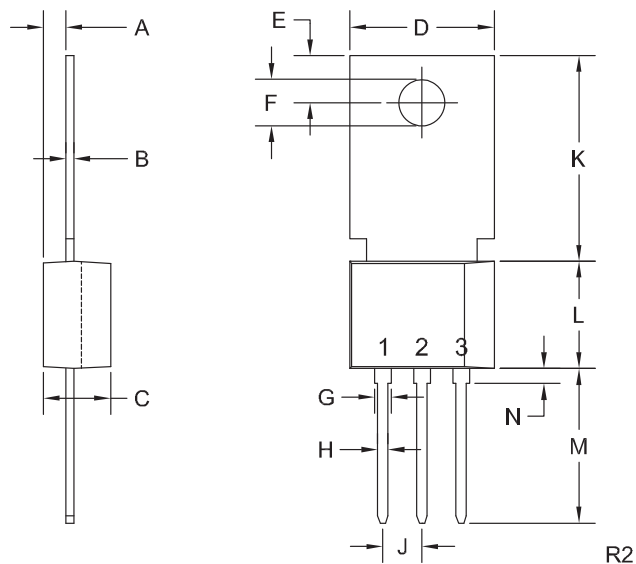
R1 (23-January 2012)

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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)

R1 (23-January 2012)