

TO-220 Plastic Package

CSD401

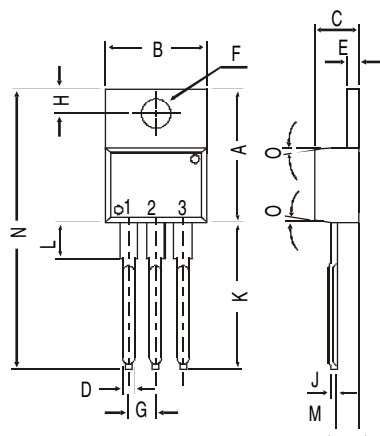
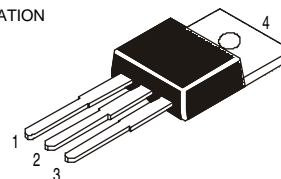
CSD401 NPN PLASTIC POWER TRANSISTOR

Complementary CSB546

TV Vertical Deflection Output Applications

PIN CONFIGURATION

1. BASE
2. COLLECTOR
3. EMITTER
4. COLLECTOR



DIM	MIN.	MAX.
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D		0.90
E	1.15	1.40
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J		0.56
K	12.70	14.73
L	2.80	4.07
M	2.03	2.92
N		31.24
O	DEG 7	

All dimensions in mm.

ABSOLUTE MAXIMUM RATINGS

Collector-base voltage (open emitter)

V_{CBO} max. 200 V

Collector-emitter voltage (open base)

V_{CEO} max. 150 V

Collector current

I_C max. 2 A

Total power dissipation up to $T_C = 25^\circ\text{C}$

P_{tot} max. 25 W

Junction temperature

T_j max. 150 $^\circ\text{C}$

Collector-emitter saturation voltage

V_{CEsat} max. 1.0 V

$I_C = 500 \text{ mA}$; $I_B = 50 \text{ mA}$

D.C. current gain

h_{FE} min. 40
max. 400

$I_C = 0.4 \text{ A}$; $V_{CE} = 10 \text{ V}$

RATINGS (at $T_A=25^\circ\text{C}$ unless otherwise specified)

Limiting values

Collector-base voltage (open emitter)

V_{CBO} max. 200 V

Collector-emitter voltage (open base)

V_{CEO} max. 150 V

Emitter-base voltage (open collector)

V_{EBO} max. 5.0 V

CSD401

Collector current	I_C	max.	2 A
Total power dissipation up to $T_C = 25^\circ\text{C}$	P_{tot}	max.	25 W
Junction temperature	T_j	max.	150 °C
Storage temperature	T_{stg}	-65 to +150	°C

CHARACTERISTICS

$T_{amb} = 25^\circ\text{C}$ unless otherwise specified

Collector cutoff current

$I_E = 0$; $V_{CB} = 150\text{ V}$

I_{CBO} max. 50 μA

Breakdown voltages

$I_C = 10\text{ mA}$; $I_B = 0$

V_{CEO} min. 150 V

$I_C = 500\text{ }\mu\text{A}$; $I_E = 0$

V_{CBO} min. 200 V

$I_E = 500\text{ }\mu\text{A}$; $I_C = 0$

V_{EBO} min. 5.0 V

Saturation voltages

$I_C = 500\text{ mA}$; $I_B = 50\text{ mA}$

V_{CEsat} max. 1.0 V

D.C. current gain

$I_C = 0.4\text{ A}$; $V_{CE} = 10\text{ V}^{**}$

h_{FE} min. 40
max. 400

Transition frequency

$I_C = 0.4\text{ A}$; $V_{CE} = 10\text{ V}$

f_T typ. 5 MHz

**** h_{FE} classification: R: 40-80 O: 70-140 Y: 120-240 G: 200-400**

Customer Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/ CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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