

TO-220 Plastic Package

CSD401

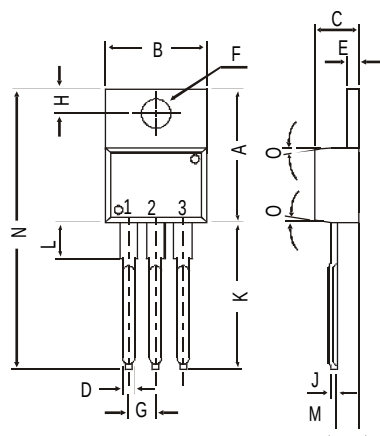
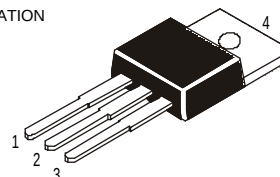
CSD401 NPN PLASTIC POWER TRANSISTOR

Complementary CSB546

TV Vertical Deflection Output Applications

PIN CONFIGURATION

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



All dimensions in mm.

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	

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

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

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

$V_{CE\text{sat}}$ 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**

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Disclaimer

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