

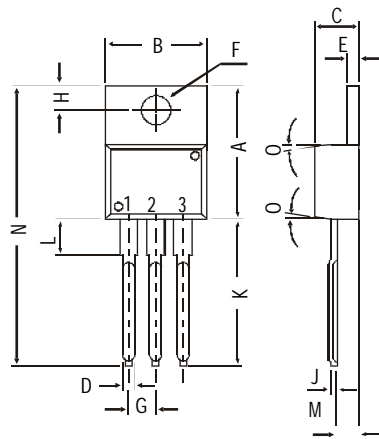
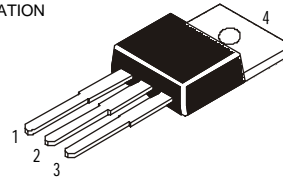
TO-220 Plastic Package

CSC2233

CSC2233 NPN PLASTIC POWER TRANSISTOR
TV Horizontal 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)
- Collector-emitter voltage (open base)
- Collector current
- Total power dissipation up to $T_C = 25^\circ\text{C}$
- Junction temperature
- Collector-emitter saturation voltage
 $I_C = 4\text{ A}; I_B = 0.4\text{ A}$
- D.C. current gain
 $I_C = 1\text{ A}; V_{CE} = 5\text{ V}$

V_{CBO}	max.	200 V
V_{CEO}	max.	60 V
I_C	max.	4 A
P_{tot}	max.	40 W
T_j	max.	150 °C
V_{CEsat}	max.	1.0 V
h_{FE}	min.	30
	max.	150

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

- Limiting values
- Collector-base voltage (open emitter)
- Collector-emitter voltage (open base)
- Emitter-base voltage (open collector)
- Collector current
- Collector current (Peak value)

V_{CBO}	max.	200 V
V_{CEO}	max.	60 V
V_{EBO}	max.	5.0 V
I_C	max.	4 A
I_{CP}	max.	10 A

Base current	I_B	max.	1.0 A
Total power dissipation up to $T_A = 25^\circ\text{C}$	P_{tot}	max.	1.5 W
Total power dissipation up to $T_C = 25^\circ\text{C}$	P_{tot}	max.	40 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

$I_E = 0$; $V_{CB} = 170\text{ V}$

I_{CBO} max. 10 μA

Emitter cut-off current

$I_C = 0$; $V_{EB} = 5\text{ V}$

I_{EBO} max. 10 μA

Breakdown voltages

$I_C = 20\text{ mA}$; $I_B = 0$

V_{CEO} min. 60 V

$I_C = 1\text{ mA}$; $I_E = 0$

V_{CBO} min. 200 V

$I_E = 1\text{ mA}$; $I_C = 0$

V_{EBO} min. 5.0 V

Saturation voltages

$I_C = 4\text{ A}$; $I_B = 0.4\text{ A}$

V_{CEsat} max. 1.0 V

V_{BEsat} max. 1.5 V

D.C. current gain

$I_C = 1\text{ A}$; $V_{CE} = 5\text{ V}$

h_{FE} min. 30

max. 150

$I_C = 4\text{ A}$; $V_{CE} = 5\text{ V}$

h_{FE} min. 20

Transition frequency

$I_C = 0.5\text{ A}$; $V_{CE} = 5\text{ V}$

f_T typ. 8 MHz

Customer Notes

Disclaimer

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