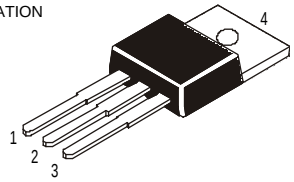
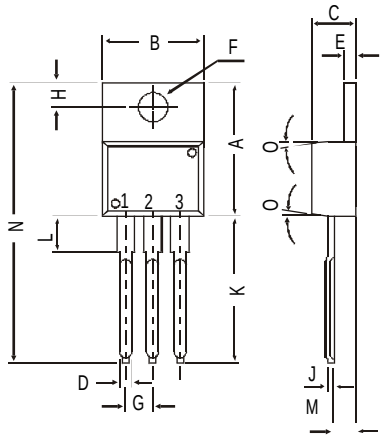
TO-220 Plastic Package **CSC2233**

CSC2233 NPN PLASTIC POWER TRANSISTOR

TV Horizontal Deflection Output Applications

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





All diminsions 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.*	*60 V*
Collector current	I_C	*max.*	*4 A*
Total power dissipation up to T_C = 25°C	P_{tot}	*max.*	*40 W*
Junction temperature	T_j	*max.*	*150 °C*
Collector-emitter saturation voltage			
I_C = 4 A; I_B = 0.4 A	V_{CEsat}	*max.*	*1.0 V*
D.C. current gain			
I_C = 1 A; V_{CE} = 5 V	h_{FE}	*min.*	*30*
		max.	*150*

RATINGS *(at T_A=25°C unless otherwise specified)*

Limiting values			
Collector-base voltage (open emitter)	V_{CBO}	*max.*	*200 V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*60 V*
Emitter-base voltage (open collector)	V_{EBO}	*max.*	*5.0 V*
Collector current	I_C	*max.*	*4 A*
Collector current (Peak value)	I_{CP}	*max.*	*10 A*

Base current	I_B	*max.*	*1.0 A*
Total power dissipation up to T_A = 25°C	P_{tot}	*max.*	*1.5 W*
Total power dissipation up to T_C = 25°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°C unless otherwise specified

Collector cutoff current			
I_E = 0; V_{CB} = 170 V	I_{CBO}	*max.*	*10 µA*
Emitter cut-off current			
I_C = 0; V_{EB} = 5 V	I_{EBO}	*max.*	*10 µA*
Breakdown voltages			
I_C = 20 mA; I_B = 0	V_{CEO}	*min.*	*60 V*
I_C = 1 mA; I_E = 0	V_{CBO}	*min.*	*200 V*
I_E = 1 mA; I_C = 0	V_{EBO}	*min.*	*5.0 V*
Saturation voltages			
I_C = 4 A; I_B = 0.4 A	V_{CEsat}	*max.*	*1.0 V*
	V_{BEsat}	*max.*	*1.5 V*
D.C. current gain			
I_C = 1 A; V_{CE} = 5 V	h_{FE}	*min.*	*30*
		max.	*150*
I_C = 4 A; V_{CE} = 5 V	h_{FE}	*min.*	*20*
Transition frequency			
I_C = 0.5 A; V_{CE} = 5 V	f_T	*typ.*	*8 MHz*

Customer Notes

Disclaimer

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