

TO-220 Plastic Package

CSA940, CSC2073

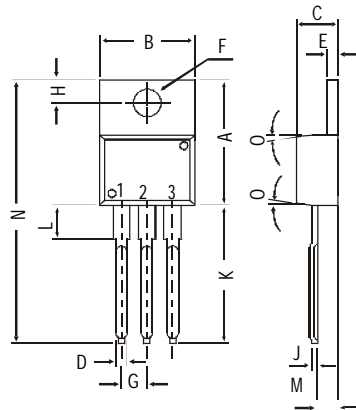
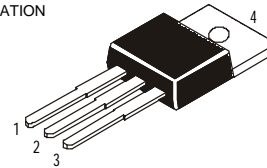
CSA940 PNP PLASTIC POWER TRANSISTOR

CSC2073 NPN PLASTIC POWER TRANSISTOR

Power Amplifier Applications and Vertical 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.	150 V
Collector-emitter voltage (open base)	V_{CEO}	max.	150 V
Collector current	I_C	max.	1.5 A
Total power dissipation up to $T_C = 25^\circ C$	P_{tot}	max.	25 W
Junction temperature	T_j	max.	150 °C
Collector-emitter saturation voltage $I_C = 500 \text{ mA}; I_B = 50 \text{ mA}$	V_{CEsat}	max.	1.5 V
D.C. current gain $I_C = 500 \text{ mA}; V_{CE} = 10 \text{ V}$	h_{FE}	min.	40
		max.	140

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

Limiting values			
Collector-base voltage (open emitter)	V_{CBO}	max.	150 V
Collector-emitter voltage (open base)	V_{CEO}	max.	150 V
Emitter-base voltage (open collector)	V_{EBO}	max.	5.0 V

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Collector current	I_C	max.	1.5 A
Base current	I_B	max.	0.5 A
Total power dissipation up to $T_C = 25^\circ\text{C}$	P_{tot}	max.	25 W
Total power dissipation up to $T_A = 25^\circ\text{C}$	P_{tot}	max.	1.5 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 $I_E = 0; V_{CB} = 120\text{ V}$	I_{CBO}	max.	10 μA
Emitter cut-off current $I_C = 0; V_{EB} = 5\text{ V}$	I_{EBO}	max.	10 μA
Breakdown voltages $I_C = 1\text{ mA}; I_B = 0$	V_{CEO}	min.	150 V
$I_C = 1\text{ mA}; I_E = 0$	V_{CBO}	min.	150 V
$I_E = 1\text{ mA}; I_C = 0$	V_{EBO}	min.	5.0 V
Saturation voltages $I_C = 500\text{ mA}; I_B = 50\text{ mA}$	V_{CEsat}	max.	1.5 V
Base emitter on voltage $I_C = 500\text{ mA}; V_{CE} = 10\text{ V}$	$V_{BE(on)}$	min. max.	0.65 V 0.85 V
D.C. current gain $I_C = 500\text{ mA}; V_{CE} = 10\text{ V}$	h_{FE}	min. max.	40 140
Output capacitance at $f = 1\text{ MHz}$ $I_E = 0; V_{CB} = 10\text{ V}$ NPN	C_o	typ.	35 pF
PNP		typ.	55 pF
Transition frequency $I_C = 500\text{ mA}; V_{CE} = 10\text{ V}$	f_T	typ.	4 MHz

Customer Notes

Disclaimer

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