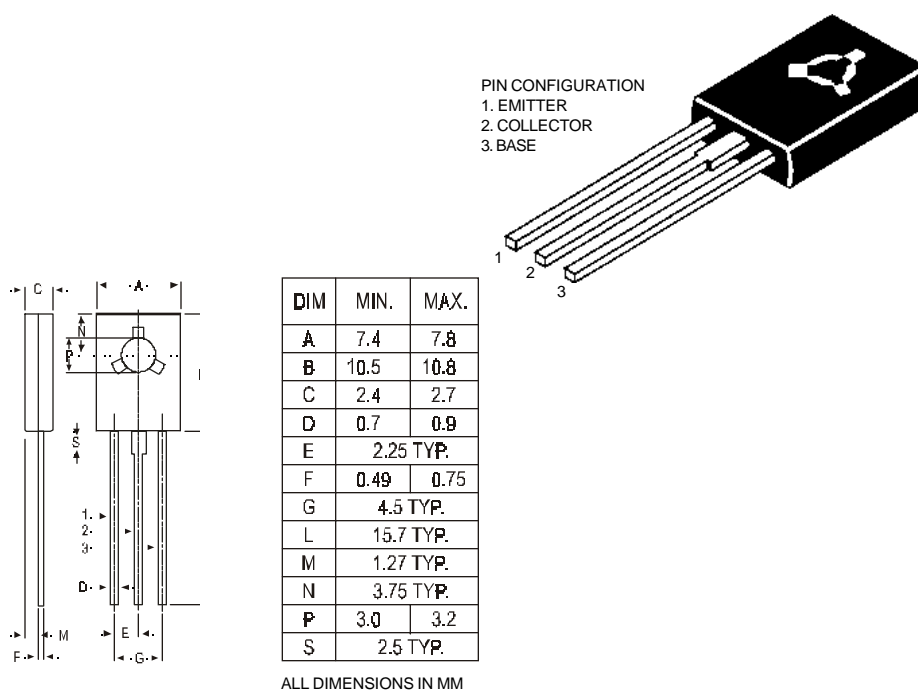


TO-126 (SOT-32) Plastic Package

CSA715

CSA715 PNP PLASTIC POWER TRANSISTOR
Complementary to CSC1162
Low frequency Power Amplifier



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
 $I_C = 2\text{ A}$; $I_B = 0.2\text{ A}$
D.C. current gain
 $I_C = 0.5\text{ A}$; $V_{CE} = 2\text{ V}$

V_{CBO}	max.	35 V
V_{CEO}	max.	35 V
I_C	max.	2.5 A
P_{tot}	max.	10 W
T_j	max.	150 °C
V_{CEsat}	max.	1.0 V
h_{FE}	min.	60
	max.	320

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

Limiting values

Collector-base voltage (open emitter)	V_{CBO}	max.	35 V
Collector-emitter voltage (open base)	V_{CEO}	max.	35 V
Emitter-base voltage (open collector)	V_{EBO}	max.	5.0 V
Collector current	I_C	max.	2.5 A

CSA715

Collector current (Peak value)	I_C	max.	3 A
Total power dissipation up to $T_A = 25^\circ\text{C}$	P_{tot}	max.	0.75 W
Total power dissipation up to $T_C = 25^\circ\text{C}$	P_{tot}	max.	10 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

$I_E = 0$; $V_{CB} = 35\text{ V}$

I_{CBO}	max.	20 μA
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Breakdown voltages

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

V_{CEO}	min.	35 V
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$I_C = 1\text{ mA}$; $I_E = 0$

V_{CBO}	min.	35 V
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$I_E = 1\text{ mA}$; $I_C = 0$

V_{EBO}	min.	5 V
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Saturation voltage

$I_C = 2\text{ A}$; $I_B = 0.2\text{ A}$

V_{CEsat}	max.	1.0 V
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Base-emitter on voltage

$I_C = 1.5\text{ A}$; $V_{CE} = 2\text{ V}$

$V_{BE(on)}$	max.	1.5 V
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D.C. current gain

$I_C = 0.5\text{ A}$; $V_{CE} = 2\text{ V}^{**}$

h_{FE}	min.	60
	max.	320

$I_C = 1.5\text{ A}$; $V_{CE} = 2\text{ V}$ (Pulse)

h_{FE}	min.	20
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Transition frequency

$I_C = 0.2\text{ A}$; $V_{CE} = 2\text{ V}$

f_T	typ.	160 MHz
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**** h_{FE} classification: B: 60-120 C: 100-200 D: 160-320**

Disclaimer

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