

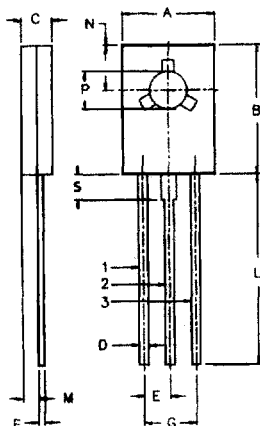
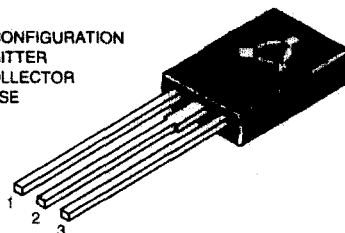
CSA715 PNP PLASTIC POWER TRANSISTOR

Complementary to CSC1162

Low frequency Power Amplifier

PIN CONFIGURATION

1. EMITTER
2. COLLECTOR
3. BASE



DIM	MIN.	MAX.
A	7.4	7.8
B	10.5	10.8
C	2.4	2.7
D	0.7	0.9
E	2.25 TYP.	
F	0.49	0.75
G	4.5 TYP.	
L	15.7 TYP.	
M	1.27 TYP.	
N	3.75 TYP.	
P	3.0	3.2
S	2.5 TYP.	

ALL DIMENSIONS IN MM

ABSOLUTE MAXIMUM RATINGS

Collector-base voltage (open emitter)

 V_{CB0} max. 35 V

Collector-emitter voltage (open base)

 V_{CEO} max. 35 V

Collector current

 I_C max. 2.5 ATotal power dissipation up to $T_C = 25^\circ\text{C}$ P_{tot} max. 10 W

Junction temperature

 T_j max. 150 $^\circ\text{C}$

Collector-emitter saturation voltage

 V_{CEsat} max. 1.0 V $I_C = 2\text{ A}; I_B = 0.2\text{ A}$

D.C. current gain

 h_{FE} min. 60
max. 320 $I_C = 0.5\text{ A}; V_{CE} = 2\text{ V}$ RATINGS (at $T_A = 25^\circ\text{C}$ unless otherwise specified)

Limiting values

Collector-base voltage (open emitter)

 V_{CB0} 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

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 $^\circ\text{C}$
Storage temperature	T_{stg}		-65 to +150 $^\circ\text{C}$

CHARACTERISTICS

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

Collector cutoff current

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

I_{CBO} max. 20 μA

Breakdown voltages

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

V_{CEO} min. 35 V

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

V_{CBO} min. 35 V

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

V_{EBO} min. 5 V

Saturation voltage

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

$V_{CE\text{sat}}$ max. 1.0 V

Base-emitter on voltage

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

$V_{BE(\text{on})}$ max. 1.5 V

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

Transition frequency

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

f_T typ. 160 MHz

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