

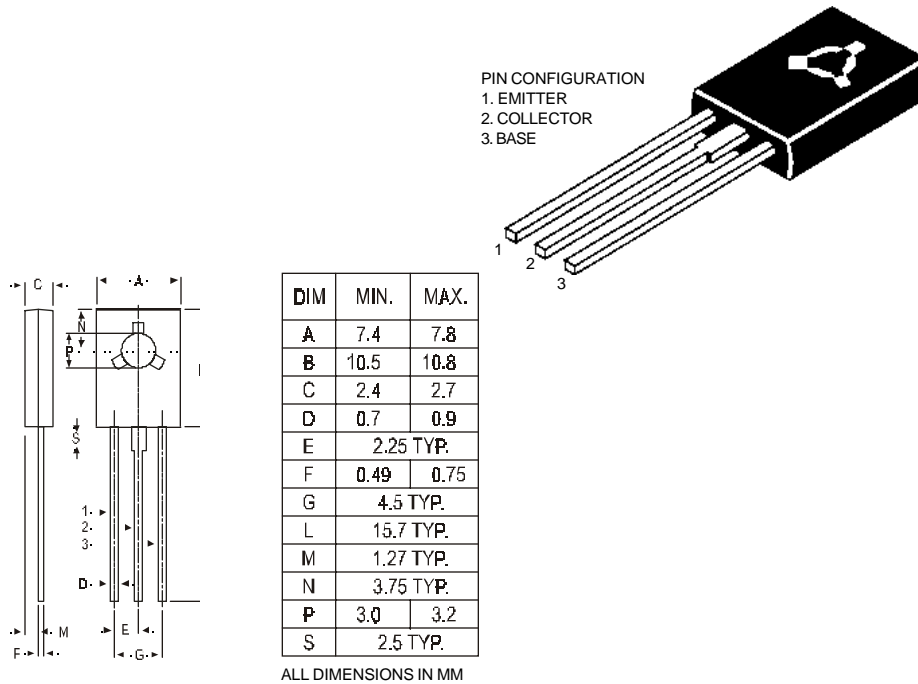
**TO-126 (SOT-32) Plastic Package**

**CSC1162**

**CSC1162 NPN PLASTIC POWER TRANSISTOR**

Complementary CSA715

Low frequency Power Amplifier



**ABSOLUTE MAXIMUM RATINGS**

Collector-base voltage (open emitter)

$V_{CBO}$  max. 35 V

Collector-emitter voltage (open base)

$V_{CEO}$  max. 35 V

Collector current

$I_C$  max. 2.5 A

Total power dissipation up to  $T_C = 25^\circ\text{C}$

$P_{tot}$  max. 10 W

Junction temperature

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

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

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

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

## CSC1162

Emitter-base voltage (open collector)	$V_{EBO}$	max.	5.0 V
Collector current	$I_C$	max.	2.5 A
Collector current (Peak)	$I_C$	max.	3.0 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

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

Collector cutoff current $I_E = 0; V_{CB} = 35\text{V}$	$I_{CBO}$	max.	20 $\mu\text{A}$
Breakdown voltages $I_C = 10\text{ mA}; I_E = 0$	$V_{CEO}$	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 $I_C = 2\text{ A}; I_B = 0.2\text{ A}$	$V_{CEsat}^*$	max.	1.0 V
Base-emitter on voltage $I_C = 1.5\text{A}; V_{CE} = 2\text{V}$ (Pulse)	$V_{BE(on)}$	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.	180 MHz

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

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