

CSA1162

LOW FREQUENCY GENERAL PURPOSE AMPLIFIER TRANSISTOR

P-N-P transistor

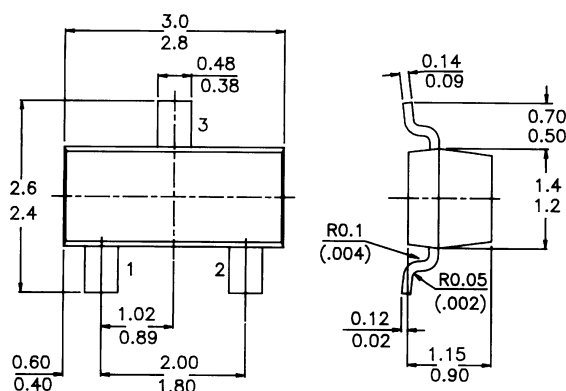
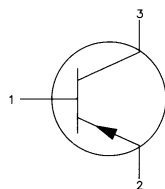
Marking

CSA1162Y-3E
CSA1162GR(G)-3F

PACKAGE OUTLINE DETAILS
ALL DIMENSIONS IN mm

Pin configuration

- 1 = BASE
- 2 = EMITTER
- 3 = COLLECTOR



ABSOLUTE MAXIMUM RATINGS

Collector-base voltage (open emitter)
 Collector-emitter voltage (open base)
 Emitter-base voltage (open collector)
 Collector current (d.c.)
 Total power dissipation at $T_{amb} = 25^{\circ}\text{C}$
 Junction temperature
 D.C. current gain

$-V_{CBO}$	max.	50 V
$-V_{CEO}$	max.	50 V
$-V_{EBO}$	max.	5 V
$-I_C$	max.	150 mA
P_{tot}	max.	150 mW
T_j	max.	150 °C
h_{FE}	min.	70
	max.	400

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

Limiting values

- Collector-base voltage (open emitter)
- Collector-emitter voltage (open base)
- Emitter-base voltage (open collector)
- Collector current (d.c.)
- Base current

$-V_{CBO}$	max.	50 V
$-V_{CEO}$	max.	50 V
$-V_{EBO}$	max.	5 V
$-I_C$	max.	150 mA
$-I_B$	max.	30 mA

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Total power dissipation at $T_{amb} = 25^{\circ}\text{C}$	P_{tot}	max.	150 mW
Storage temperature	T_{stg}	-50 to +150 °C	
Junction temperature	T_j	max.	150 °C

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

Collector-emitter breakdown voltage $-I_C = 1 \text{ mA}; I_B = 0$	$-V_{(BR)CEO}$	min	50 V
Collector cut-off current $-V_{CB} = 50 \text{ V}; I_E = 0$	$-I_{CBO}$	max.	100 nA
Emitter cut-off current $V_{EB} = 5 \text{ V}; I_C = 0$	I_{EBO}	max.	100 nA
Saturation voltage $-I_C = 100 \text{ mA}; -I_B = 10 \text{ mA}$	$-V_{CEsat}$	max.	0.3 V
D.C. current gain $I_C = 2 \text{ mA}; -V_{CE} = 6 \text{ V}$	h_{FE}	min. max.	70 400
	Y	min. max.	120 240
	$GR(G)$	min. max.	200 400
Transition frequency $V_{CE} = 10 \text{ V}; I_C = 1 \text{ mA}$	f_T	min.	80 MHz
Collector output capacitance $V_{CB} = 10 \text{ V}; I_E = 0; f = 1 \text{ MHz}$	C_{ob}	max.	7 pF
Noise figure $V_{CE} = 6 \text{ V}; I_C = 0.1 \text{ mA}$ $f = 1 \text{ kHz}; R_g = 10 \text{ kW}$	N_F	max.	10 dB

Disclaimer

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