

**SOT-23 Formed SMD Package**

**CSA1362**

**LOW FREQUENCY POWER AMPLIFIER TRANSISTOR**

*P-N-P transistor*

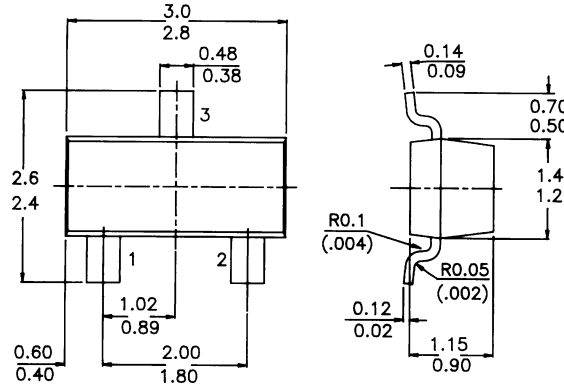
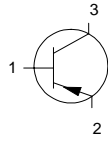
**Marking**

CSA1362GR = 62

**PACKAGE OUTLINE DETAILS**  
ALL DIMENSIONS IN mm

**Pin configuration**

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



**ABSOLUTE MAXIMUM RATINGS**

Collector-base voltage (open emitter)	$-V_{CB0}$	max.	15 V
Collector-emitter voltage (open base)	$-V_{CEO}$	max.	15 V
Emitter-base voltage (open collector)	$-V_{EBO}$	max.	5 V
Collector current (d.c.)	$-I_C$	max.	800 mA
Total power dissipation at $T_{amb} = 25^\circ C$	$P_{tot}$	max.	200 mW
Junction temperature	$T_j$	max.	150 °C
D.C. current gain			
$-I_C = 100 \text{ mA}; -V_{CE} = 1 \text{ V}$	$h_{FE}$	min.	120
		max.	400

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

*Limiting values*

Collector-base voltage (open emitter)	$-V_{CB0}$	max.	15 V
Collector-emitter voltage (open base)	$-V_{CEO}$	max.	15 V
Emitter-base voltage (open collector)	$-V_{EBO}$	max.	5 V
Collector current (d.c.)	$-I_C$	max.	800 mA
Total power dissipation at $T_{amb} = 25^\circ C$	$P_{tot}$	max.	200 mW

**CSA1362**

Storage temperature	$T_{stg}$	-55 to +150	°C
Junction temperature	$T_j$	max. 150	°C

**THERMAL CHARACTERISTICS**

$$T_j = P (R_{th\ j-t} + R_{th\ s-a}) + T_{amb}$$

Thermal resistance

from junction to ambient	$R_{th\ j-a}$	556	°C/mW
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**CHARACTERISTICS** (at  $T_A = 25^\circ\text{C}$  unless otherwise specified)

Collector-emitter breakdown voltage

$-I_C = 10\text{ mA}$	$-V_{(BR)CEO}$ min.	15	V
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Collector cut-off current

$-V_{CB} = 15\text{ V}$	$-I_{CBO}$ max.	100	nA
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Emitter cut-off current

$V_{EB} = 5\text{ V}$	$I_{EBO}$ max.	100	nA
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Saturation voltages

$-I_C = 400\text{ mA}; -I_B = 8\text{ mA}$	$-V_{CEsat}$ max.	0.25	V
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Base Emitter on voltage

$I_C = 10\text{ mA}, V_{CE} = 1\text{ V}$	$-V_{BE(on)}$ min.	0.5	V
	max.	0.8	V

D.C. current gain

$I_C = 100\text{ mA}; -V_{CE} = 1\text{ V}$	$h_{FE}$ min.	120
	max.	400

$Y$ min.	120
max.	240

$GR$ min.	200
max.	400

$I_C = 800\text{ mA}; V_{CE} = 1\text{ V}$	min.	40
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Transition frequency

$V_{CE} = 5\text{ V}, I_C = 10\text{ mA}$	$f_T$ typ.	120	MHz
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Collector output capacitance

$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$	$C_{ob}$ typ.	13	pF
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### Disclaimer

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