

**SOT-23 Formed SMD Package**

**CSA1362**

**LOW FREQUENCY POWER AMPLIFIER TRANSISTOR**

*P-N-P transistor*

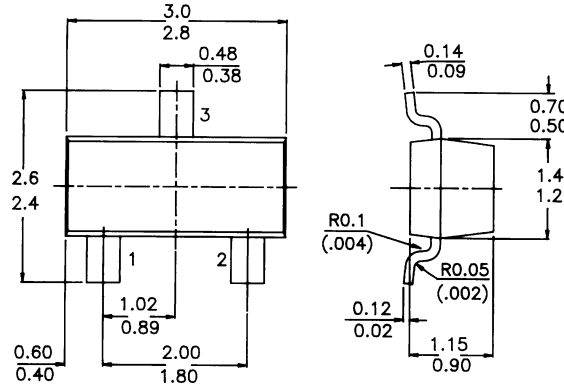
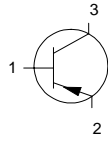
**Marking**

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)	$-V_{CBO}$	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)	$-V_{CBO}$	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
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D.C. current gain

$I_C = 100\text{ mA}; -V_{CE} = 1\text{ V}$	$h_{FE}$	min. 120 max. 400
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$Y$	min. 120 max. 240
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$GR$	min. 200 max. 400
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$I_C = 800\text{ mA}; V_{CE} = 1\text{ V}$		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

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/ CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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