

SOT-23 Formed SMD Package

CSA1362

LOW FREQUENCY POWER AMPLIFIER TRANSISTOR

P-N-P transistor

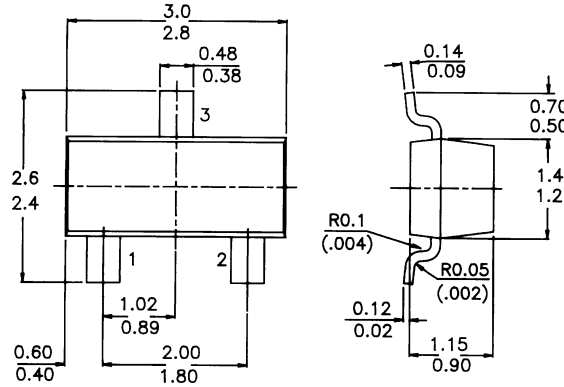
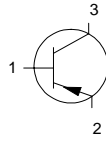
Marking

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

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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