

SOT-23 Formed SMD Package

CSA1362

LOW FREQUENCY POWER AMPLIFIER TRANSISTOR

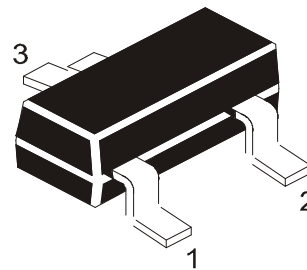
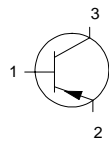
P-N-P transistor

Marking

CSA1362GR = 62

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 $T_{amb} = 25^{\circ}\text{C}$	P_{tot}	max	200 mW
Junction temperature	T_j	max.	150 $^{\circ}\text{C}$
D.C. current gain	h_{FE}	min.	120
$-I_C = 100\text{ mA}; -V_{CE} = 1\text{ V}$		max.	400

RATINGS (at $T_A = 25^{\circ}\text{C}$ 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 $T_{amb} = 25^{\circ}\text{C}$	P_{tot}	max	200 mW

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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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Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
SOT-23 T&R	3K/reel	136 gm/3K pcs	3" x 7.5" x 7.5"	12.0K	17" x 15" x 13.5"	192.0K	12 kgs
			9" x 9" x 9"	51.0K	19" x 19" x 19"	408.0K	28 kgs
	10K/reel	415 gm/10K pcs	13" x 13" x 0.5"	10.0K	17" x 15" x 13.5"	300.0K	16 kgs

Customer Notes

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

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Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119

email@cdil.com www.cdilsemi.com