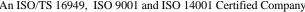
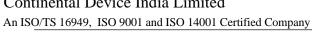


# Continental Device India Limited









# **SOT-23 Formed SMD Package**

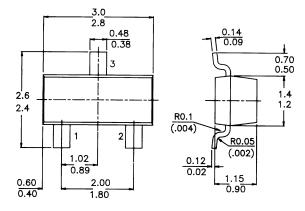
## CSA1362

# 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 $T_{amb} = 25$ °C	$P_{tot}$	max	200	mW
Junction temperature	$T_{j}$	max.	<i>150</i>	$^{\circ}$ $C$
D.C. current gain	•			
$-I_C = 100 \text{ mA; } -V_{CE} = 1 \text{ V}$	$h_{\!F\!E}$	min.	120	
		may	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 <sub>mb</sub> = 25°C	$P_{tot}$	max	200	mW

# **CSA1362**

Storage temperature Junction temperature	T <sub>stg</sub> Tj	–55 max.	to +150 150	° C ° C
<b>THERMAL CHARACTERISTICS</b> $T_j = P (R_{th j-t} + R_{th s-a}) + T_{amb}$ Thermal resistance				
from junction to ambient	$R_{th\ j-a}$		556	°C/mW
<b>CHARACTERISTICS</b> (at $T_A = 25$ °C unless otherwis	se specified)			
Collector-emitter breakdown voltage $-I_C = 10 \text{ mA}$	-V <sub>(BR)</sub> CEC	min.	15	V
Collector cut-off current				
$-V_{CB} = 15 V$	-I <sub>CBO</sub>	max.	100	nA
Emitter cut-off current $V_{EB} = 5 V$	$I_{EBO}$	max.	100	nΑ
Saturation voltages $-I_C = 400 \text{ mA}; -I_B = 8 \text{ mA}$	-V <sub>CEsat</sub>	max.	0.25	V
Base Emitter on voltage $I_C = 10 \text{ mA}, V_{CE} = 1 \text{ V}$	-V <sub>BE(on)</sub>	min.	0.5	V
		max.	0.8	V
D.C. current gain				
$I_C = 100 \text{ mA}; -V_{CE} = 1 \text{ V}$	hFE	min. max.	120 400	
	Y	min.	120 240	
	GR	max.	200	
	GA	min. max.	400	
$I_C = 800 \text{ mA}; \ V_{CE} = 1 \ V$		min.	40	
Transition frequency $V_{CE} = 5V$ , $I_C = 10 \text{ mA}$	$f_T$	typ.	120	MHz
Collector output capacitance $V_{CB} = 10V$ , $I_E = 0$ , $f = 1$ MHz	$C_{ob}$	typ.	13	pF

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