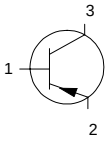
SOT-23 Formed SMD Package **CSA1362**

LOW FREQUENCY POWER AMPLIFIER TRANSISTOR

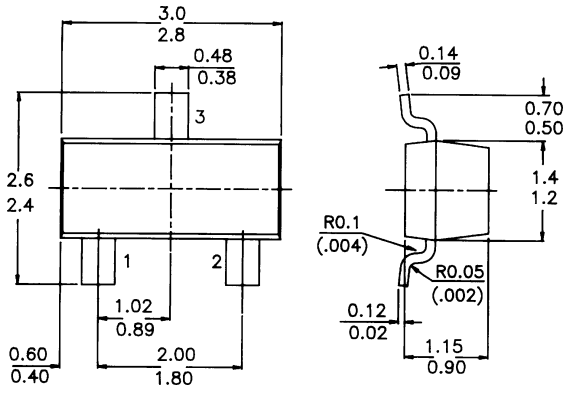
P–N–P transistor

Marking
CSA1362GR = 62

Pin configuration
1 = BASE
2 = EMITTER
3 = COLLECTOR



PACKAGE OUTLINE DETAILS
ALL DIMENSIONS IN mm



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.*	*150*	*° C*
D.C. current gain				
$-I_C$ = 100 mA; $-V_{CE}$ = 1 V	h_{FE}	*min.*	*120*	
		max.	*400*	

RATINGS *(at T_A = 25°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°C	P_{tot}	*max*	*200*	*mW*

Storage temperature	T_{stg}		*–55 to +150*	*° C*
Junction temperature	*Tj*	*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

CHARACTERISTICS *(at T_A = 25°C unless otherwise specified)*

Collector–emitter breakdown voltage				
$-I_C$ = *10 mA*	$-V_{(BR)CEO}$	*min.*	*15*	*V*
Collector cut–off current				
$-V_{CB}$ = *15 V*	$-I_{CBO}$	*max.*	*100*	*nA*
Emitter cut-off current				
V_{EB} = *5 V*	I_{EBO}	*max.*	*100*	*nA*
Saturation voltages				
$-I_C$ = *400 mA;* $-I_B$ = *8 mA*	$-V_{CEsat}$	*max.*	*0.25*	*V*
Base Emitter on voltage				
I_C = *10 mA,* V_{CE} = *1 V*	$-V_{BE(on)}$	*min.*	*0.5*	*V*
		max.	*0.8*	*V*
D.C. current gain				
I_C = *100 mA;* $-V_{CE}$ = *1 V*	h_{FE}	*min.*	*120*	
		max.	*400*	
	Y	*min.*	*120*	
		max.	*240*	
	GR	*min.*	*200*	
		max.	*400*	
I_C = *800 mA;* V_{CE} = *1 V*		*min.*	*40*	
Transition frequency				
V_{CE} = *5V,* I_C = *10 mA*	f_T	*typ.*	*120*	*MHz*
Collector output capacitance				
V_{CB} = *10V,* I_E = *0, f = 1 MHz*	C_{ob}	*typ.*	*13*	*pF*

Notes

Disclaimer

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