

PRELIMINARY

2SA2068

Notices: This is not a final specification.
Some parametric limits are subject to change.

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

2SA2068 is a super mini package resin sealed silicon PNP epitaxial transistor, It is designed for low frequency application. Since it is a super-thin flat lead type package, a high-density mounting are possible. Complementary with 2SA1235A.

FEATURE

- Super-thin flat lead type package. $t=0.45\text{mm}$
- Excellent linearity of DC forward current gain.
- Low collector to emitter saturation voltage
 $V_{CE(sat)} = -0.3\text{V max}$ ($I_C = -100\text{mA}$, $I_B = -10\text{mA}$)

APPLICATION

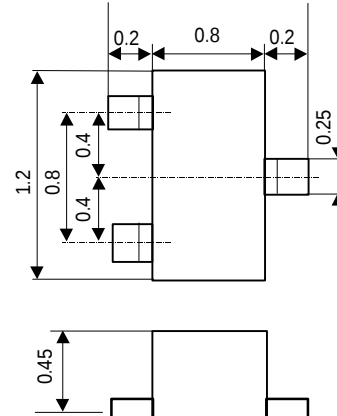
For hybrid IC, small type machine low frequency voltage amplify application.

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	-50	V
V_{CEO}	Collector to Emitter voltage	-6	V
V_{EBO}	Emitter to Base voltage	-50	V
I_O	Collector current	-200	mA
P_C	Collector dissipation	100	mW
T_j	Junction temperature	+125	
T_{stg}	Storage temperature	-55 ~ +125	

OUTLINE DRAWING

Unit: mm



JEITA:

TERMINAL CONNECTER

: BASE

: EMITTER

: COLLECTOR

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

			Limits			
			Min	Typ	Max	
Collector to Emitter Breakdown voltage	$V(BR)_{CEO}$	$I_C = -100\mu\text{A}$, $R_{BE} = \infty$	-50	—	—	V
Collector cut off current	I_{CBO}	$V_{CB} = -50\text{V}$, $I_E = 0\text{mA}$	-	-	-0.1	μA
Emitter cut off current	I_{EBO}	$V_{EB} = -6\text{V}$, $I_C = 0\text{mA}$	-	-	-0.1	μA
DC forward current gain	h_{FE}	$V_{CE} = -6\text{V}$, $I_C = -1\text{mA}$	150		800	-
DC forward current gain	h_{FE}	$V_{CE} = -6\text{V}$, $I_C = -0.1\text{mA}$	90	-	-	-
C to E saturation voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}$, $I_B = -10\text{mA}$	-	-	-0.3	v
Gain bandwidth product	f_T	$V_{CE} = -6\text{V}$, $I_E = 10\text{mA}$	-	200	-	MHz
Collector output capacitance	C_{ob}	$V_{CB} = -6\text{V}$, $I_E = 0\text{mA}$, $f = 1\text{MHz}$	-	4.0	-	pF
Noise figure	NF	$V_{CE} = -6\text{V}$, $I_E = 0.3\text{mA}$, $f = 100\text{Hz}$, $R_G = 10\text{k}\Omega$	-	-	20	dB

It shows h_{FE} classification in below table.

Item	E	F	G
h_{FE}	150 ~ 300	250 ~ 500	400 ~ 800
Abbrivation	ME	MF	MG



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