# **PRELIMINARY**

2SA2068

Notics: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=0.45mm Excellent linearly of DC forward current gain. Low collector to emitter saturation voltage

VCE(sat)=-0.3V max (@Ic=-100mA/IB=-10mA)

# **APPLICATION**

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

# MAXIMUM RATINGS(Ta=25 )

Symbol	Parameter	Ratings	Unit
V <sub>CBO</sub>	Collector to Base voltage	-50	V
$V_{CEO}$	Collector to Emitter voltage	-6	V
$V_{EBO}$	Emitter to Base voltage	-50	V
I <sub>o</sub>	Collector current	-200	mA
P <sub>c</sub>	Collector dissipation	100	mW
T <sub>j</sub>	Junction temperature	+ 125	
$T_{stg}$	Storage temperature	-55 ~ + 125	

# JEITA: TERMINAL CONNECTER : BASE : EMITTER : COLLECTOR

# ELECTRICAL CHARACTERISTICS(Ta=25)

			Limits			
			Min	Тур	Max	
Collector to Emitter Breakdown voltage	V(BR)ceo	I <sub>C</sub> =-100 μ A, R <sub>BE</sub> =	-50			V
Collector cut off current	ICBO	V <sub>CB</sub> =-50V, I <sub>E</sub> =0mA	-	-	-0.1	μA
Emitter cut off current	IEBO	V <sub>EB</sub> =-6V, I <sub>C</sub> =0mA	-	-	-0.1	μА
DC forward current gain	hFE	V <sub>CE</sub> =-6V, I <sub>C</sub> =-1mA	150		800	-
DC forward current gain	hFE	V <sub>CE</sub> =-6V, I <sub>C</sub> =-0.1mA	90	-	-	-
C to E saturation voltage	VCE(sat)	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA	-	-	- 0.3	٧
Gain bandwidth product	fT	V <sub>CE</sub> =-6V, I <sub>E</sub> =10mA		200	-	MHz
Collector output capacitance	Cob	V <sub>CB</sub> =-6V, I <sub>E</sub> =0mA,f=1MHz - 4.0		4.0	-	pF
Noise figure	NF	V <sub>CE</sub> =-6V, I <sub>E</sub> =0.3mA,f=100Hz,RG=10k	-	-	20	dB

It shows hFE classification in below table.

Item	Е	F	G	
hFE	150 ~ 300	250 ~ 500	400 ~ 800	
Abbrivation	ME	MF	MG	



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