〈SMALL-SIGNAL TRANSISTOR〉

RT1A3906-T122

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE(mini type)

DESCRIPTION

RT1A3906 is a super mini package resin sealed silicon PNP epitaxial transistor,
It is designed for low frequency voltage application.

FEATURE

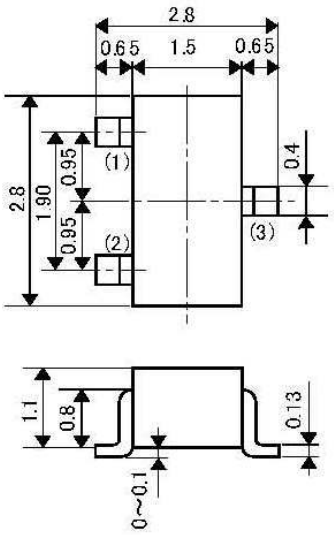
- ●Excellent linearity of DC forward gain.
- ●Super mini package for easy mounting
- ●Small collector to emitter saturation voltage.
  VCE(sat)=-0.4Vmax (@IC=-50mA、IB=-5mA)

APPLICATION

For Hybrid IC,small type machine low frequency voltage Amplify application.

OUTLINEDRAWING

unit : mm



Terminal connection
①:Base
②:Emitter
③:Collector

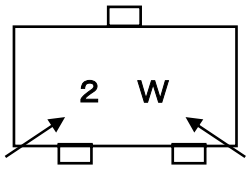
JEITA:SC-59

JEDEC : TO-236resemble

MAXIMUM RATINGS(Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	-60	V
V_{CEO}	Collector to Emitter voltage	-40	V
V_{EBO}	Emitter to Base voltage	-6	V
I_C	Collector current	200	mA
P_c	Collector dissipation	150	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	-55～+150	℃

Marking Figure



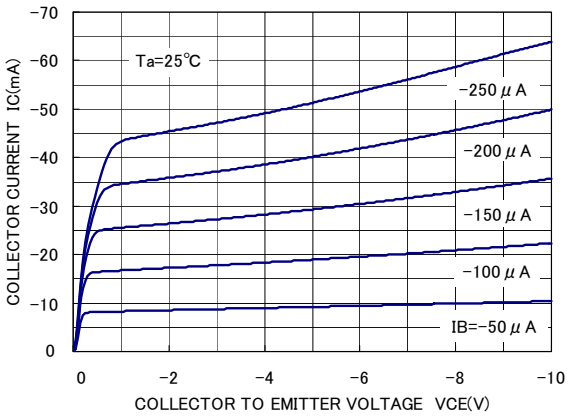
Abbreviation for Kind

hFE Item

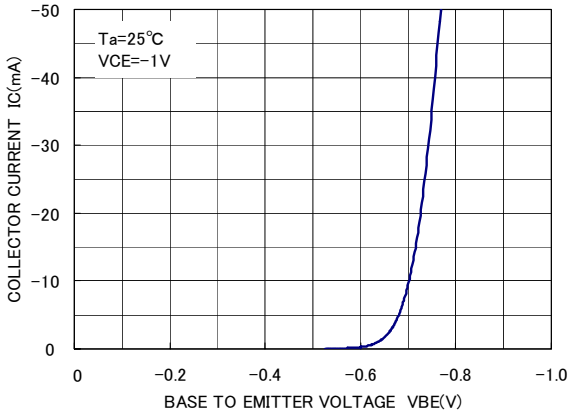
ELECTRICAL CHARACTERISTICS(Ta=25℃)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Min	Min	
V(BR)CEO	C to E break down voltage	Ic=-1mA, RBE=∞	-40			V
V(BR)CBO	C to B break down voltage	Ic=-10μA, IE=0	-60			V
V(BR)EBO	E to B break down voltage	IE =-10μA, Ic=0	-6			V
IBL	Base cut off current	VCE=-30V, VEB=-3V			-50	nA
ICEX	Collector cut off current	VCE=-30V, VEB=-3V			-50	nA
hFE	DC forward current gain	VCE=-1V, Ic=-10mA	100		300	
V CE (sat)	C to E Saturation Voltage	Ic=-50mA, I B=-5mA	—		-400	mV
V BE (sat)	B to E Saturation Voltage	Ic=-50mA, I B=-5mA	—		-950	mV
fT	Gain bandwidth product	VCE=-20V, I C=-10mA ,f=100MHz	250		—	MHz
Cob	Collector output capacitance	VCB=-5V, IE=0, f=1MHz	—		5.0	pF

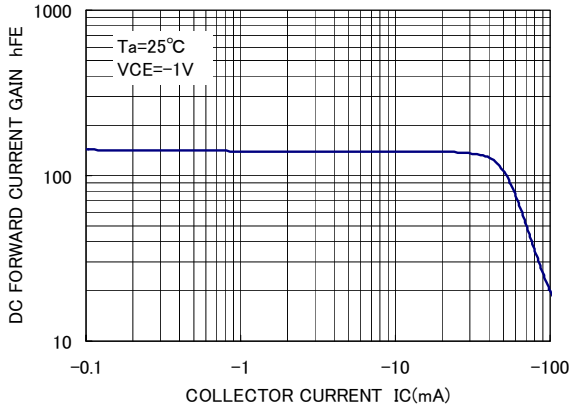
COMMON EMITTER OUTPUT



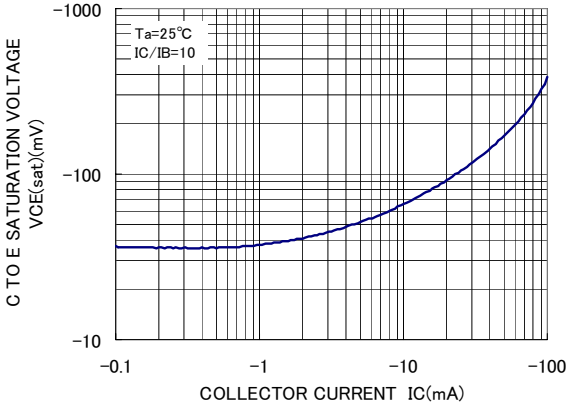
COMMON EMITTER TRANSFER



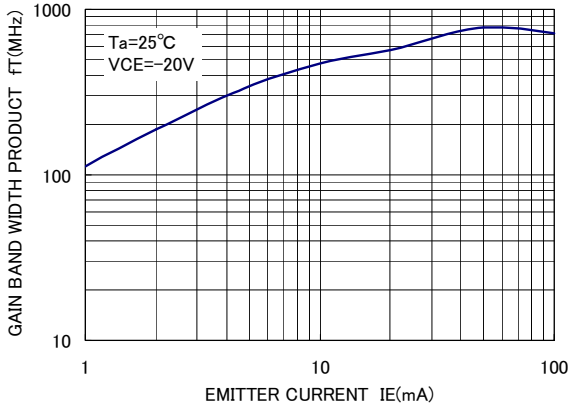
DC FORWARD CURRENT GAIN
VS.COLLECTOR CURRENT



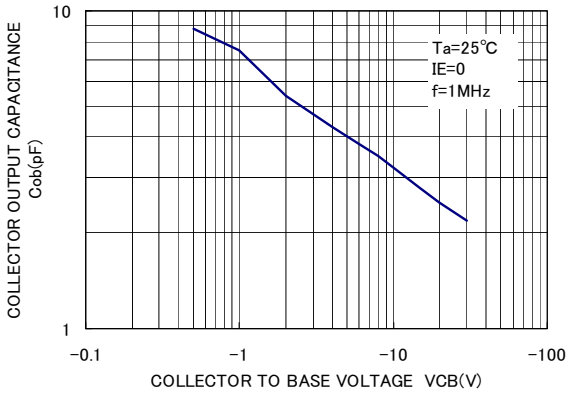
COLLECTOR EMITTER SATURATION VOLTAGE
VS.COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT VS.
EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS.COLLECTOR TO BASE VOLTAGE



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