<SMALL-SIGNAL TRANSISTOR>

PRELIMINARY

Notice : This is not a final specification

Some parametric are subject to change.

INC6008AP1

FOR LOW FREQUENCY AMPLIFY APPLICATION

SILICON NPN EPITAXIAL TYPE

DESCRIPTION

INC6008AP1 is a silicon NPN transistor.

It is designed with high voltage.

FEATURE

・Small package for easy mounting.

・High voltage V_{CEO} = 140V

・High collector current Ic=1A

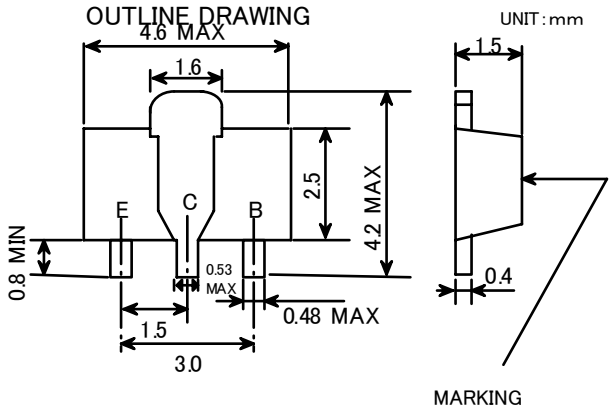
・Low voltage VCE(sat) = 0.7V(MAX)

APPLICATION

Relay drive, Power supply

OUTLINE DRAWING

UNIT : mm



TERMINAL CONNECTOR

E : EMITTER

C : COLLECTOR

B : BASE

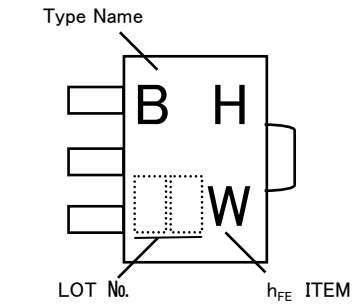
JEITA:SC-62

JEDEC:SOT-89

MAXIMUM RATING (Ta=25℃)

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	160	V
V_{EBO}	Emitter to Base voltage	5	V
V_{CEO}	Collector to Emitter voltage	140	V
I_C	Collector current	1	A
P_C	Collector dissipation(Ta=25℃)	500	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	−55～+150	℃

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25℃)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B break down voltage	I_C=100μA, I_E=0mA	160	−	−	V
$V_{(BR)EBO}$	E to B break down voltage	I_E=100μA, I_C=0mA	5	−	−	V
$V_{(BR)CEO}$	C to E break down voltage	I_C=10mA, R_{BE}=∞	140	−	−	V
I_{CBO}	Collector cut off current	V_{CB}=140V, I_E=0mA	−	−	100	nA
I_{EBO}	Emitter cut off current	V_{EB}=4V, I_C=0mA	−	−	100	nA
hFE1	DC forward current gain1	V_{CE}=10V, I_C=150mA	100	−	300	−
hFE2	DC forward current gain2	V_{CE}=10V, I_C=1A	−	10	−	−
VCE(sat)	C to E saturation voltage	I_C=150mA, I_B=15mA	−	−	0.7	V
VBE(sat)	B to E saturation voltage	I_C=150mA, I_B=15mA	−	−	1.1	V
fT	Gain bandwidth product	V_{CE}=10V, I_E=−50mA	100	−	−	MHz
Cob	Collector output capacitance	V_{CB}=10V, I_E=0mA, f=1MHz	−	−	15	pF

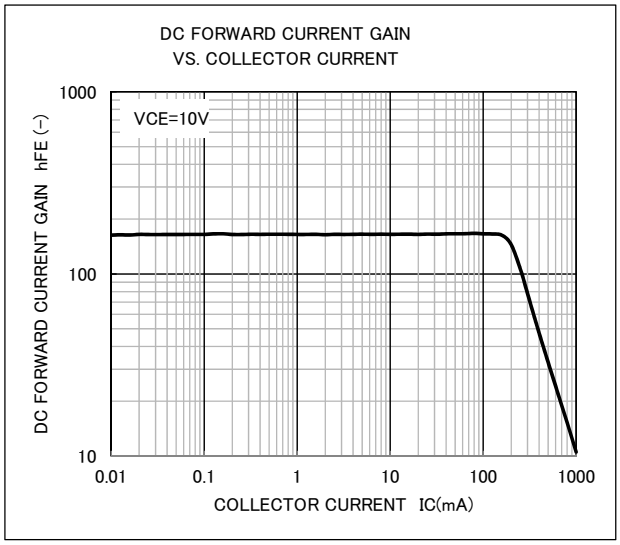
PRELIMINARY
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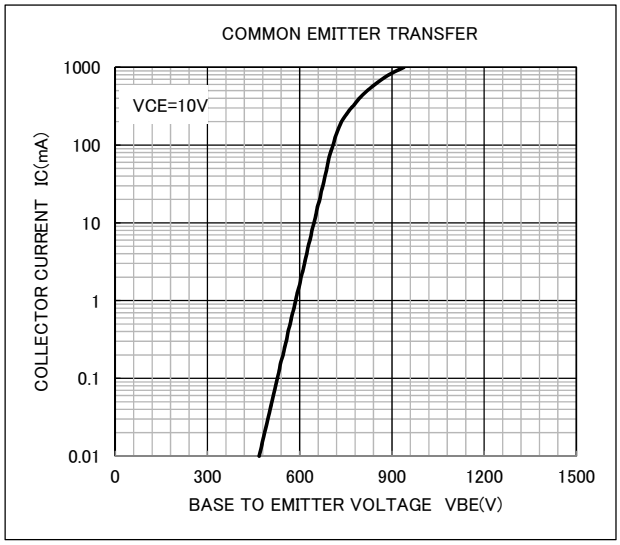
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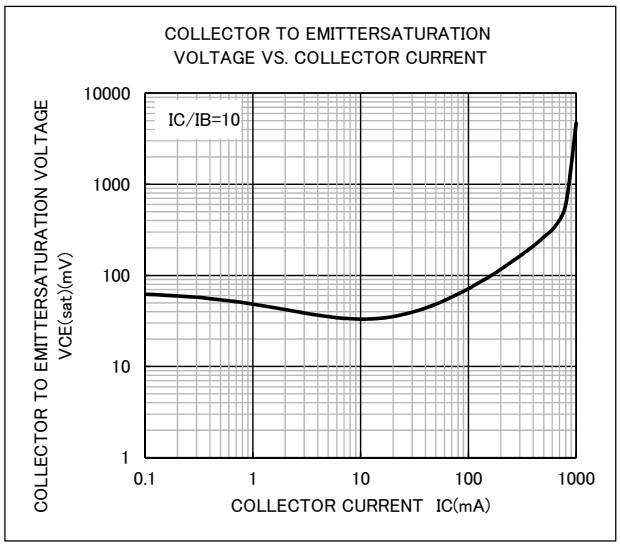
INC6008AP1

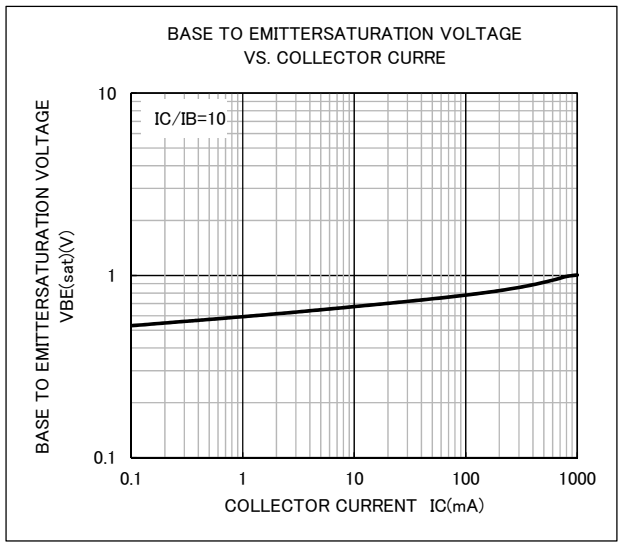
FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

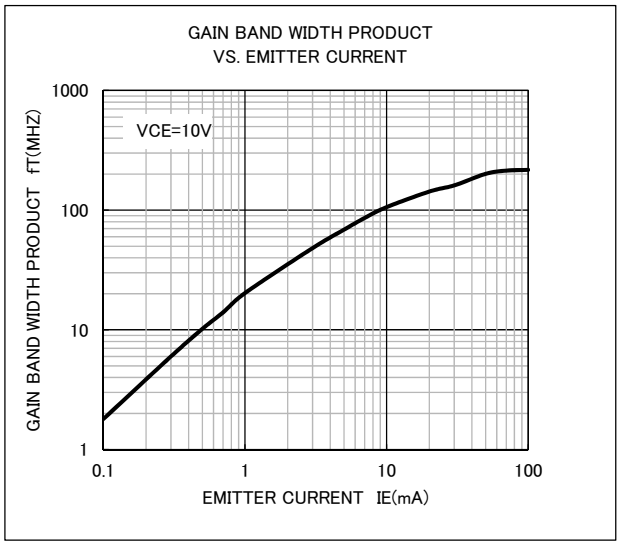
TYPICAL CHARACTERISTICS (Ta=25°C)

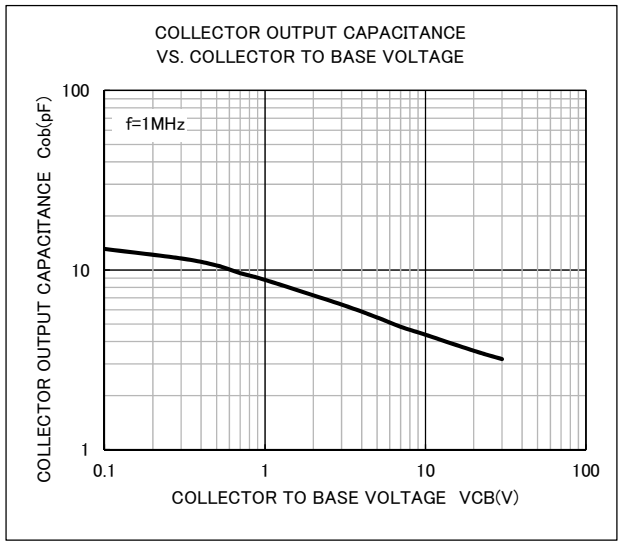












PRELIMINARY

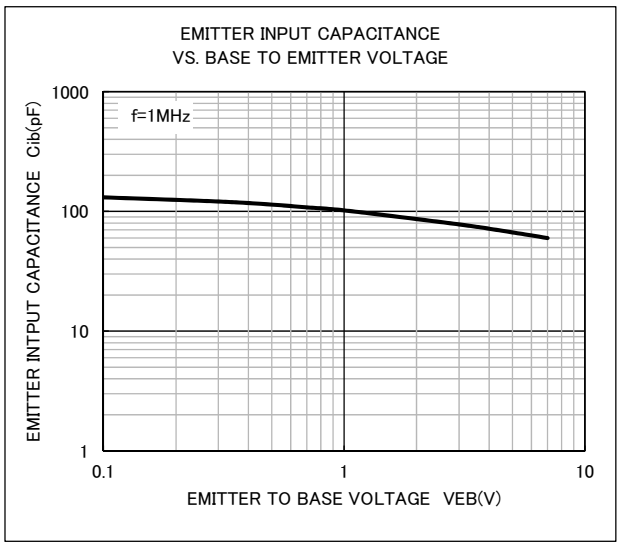
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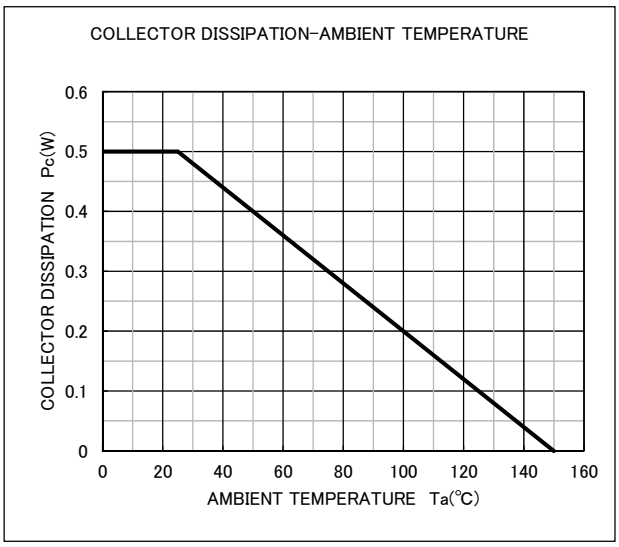
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INC6008AP1

FOR LOW FREQUENCY AMPLIFY APPLICATION

SILICON NPN EPITAXIAL TYPE





ISAHAYA ELECTRONICS CORPORATION

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Mar.2013