〈SMALL-SIGNAL TRANSISTOR〉

ISB1035AS1

FOR LOW FREQUENCY POWOR AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

ISB1035AS1 is a resin sealed silicon PNP epitaxial type transistor. It is designed for low frequency power amplify application. Complementary with ISD1447AS1.

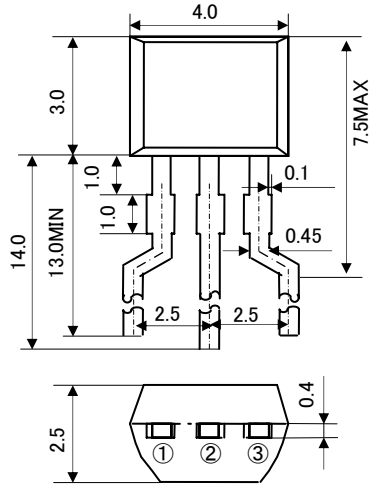
FEATURE

- ●High collector current. I_{CM}= 1.5A
- ●High gain band width product. fT= 100MHz typ
- ●High collecot dissipation. Pc= 600mW
- ●Excellent linearity of DC forward current gain.

APPLICATION

Radio, tape recorder, small type stereo, etc.
Low frequency power amplify circuit with 2 to 3.5W output.

OUTLINE DRAWING Unit:mm



JEITA:
JEDEC:

TERMINAL CONNECTER
①:EMITTER
②:COLLECTOR
③:BASE

MAXIMUM RATINGS(Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	−30	V
V_{EBO}	Emitter to Base voltage	−4	V
V_{CEO}	Collector to Emitter voltage	−25	V
I_C	Collector current	−1	A
I_{CM}	Peak collector current	−1.5	A
P_c	Collector dissipation	600	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	−55～+150	℃

ELECTRICAL CHARACTERISTICS(Ta=25℃)

Parameter	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	I_C= −10μA , I_E =0mA	−30	−	−	V
$V_{(BR)EBO}$	E to B break down voltage	I_E= −10μA , I_C =0mA	−4	−	−	V
$V_{(BR)CEO}$	C to E break down voltage	I_C= −100μA , R_{BE}= ∞	−25	−	−	V
ICBO	Collector cut off current	V_{CB}= −25V , I_E= 0mA	−	−	−1	μA
IEBO	Emitter cut off current	V_{EB}= −2V , I_C= 0mA	−	−	−1	μA
hFE※	DC forward current gain	V_{CE} = −1V , I_C= −500mA	55	−	300	−
VCE(sat)	C to E Saturation Voltage	I_C= −500mA , I_B= −25mA	−	−	−0.5	V
fT	Gain band width product	V_{CE}= −6V , I_E= 10mA	−	100	−	MHz

※) It shows hFE classification in right table.

Item	C	D	E
hFE item	55～110	90～180	150～300

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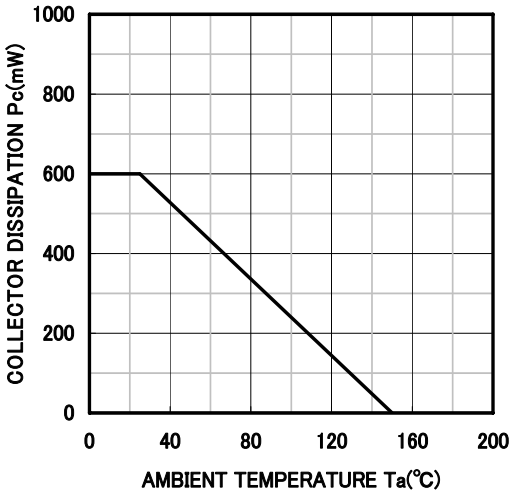
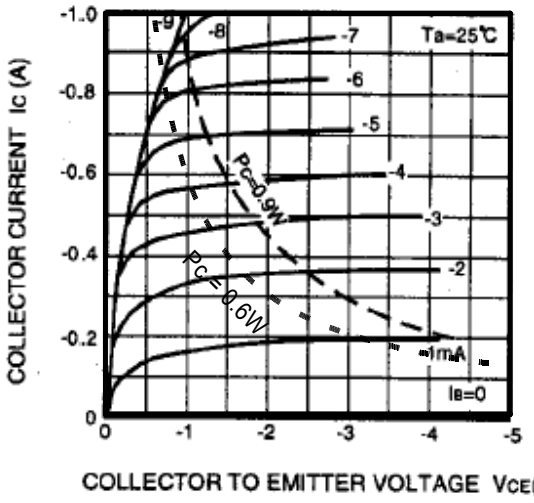
TYPICAL CHARACTERISTICS

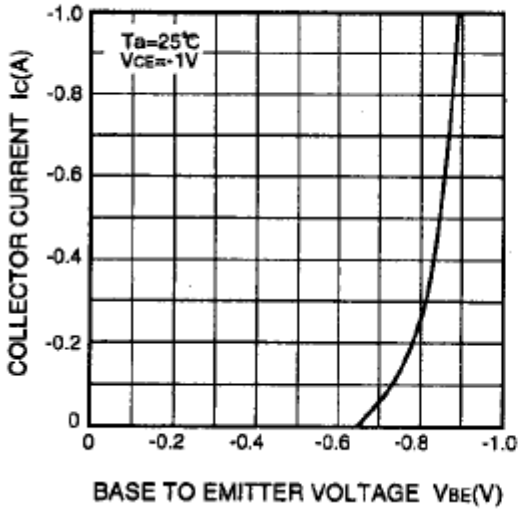
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



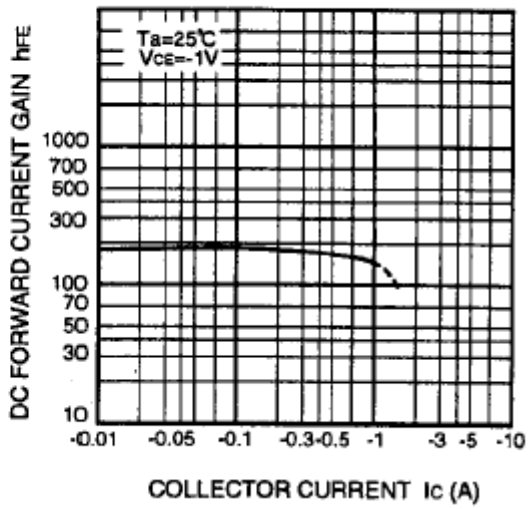
COMMON EMITTER OUTPUT



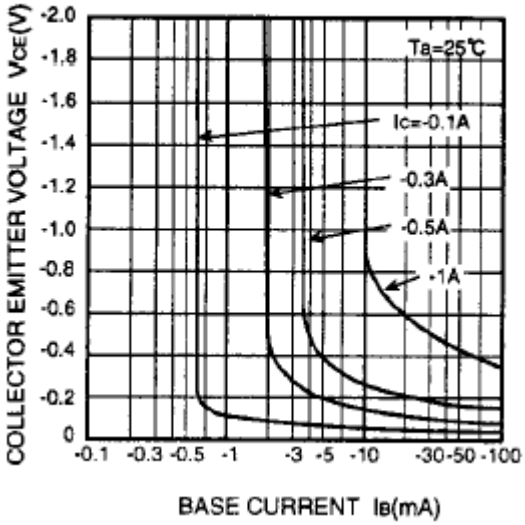
COMMON EMITTER TRANSFER



DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT



ISAHAYA ELECTRONICS CORPORATION

6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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