〈Transistor〉

ISA2191AT2

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

ISA2191AT2 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.

FEATURE

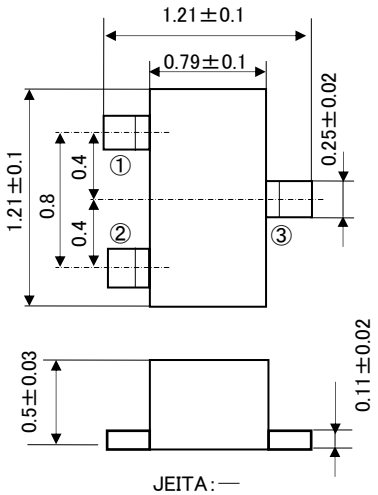
- Super-thin flat lead type package. t=0. 5mm
- Excellent linearly of DC forward current gain.
- Low collector to emitter saturation voltage
  VCE(sat)=-0.3V max (@Ic=-100mA/IB=-10mA)

APPLICATION

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

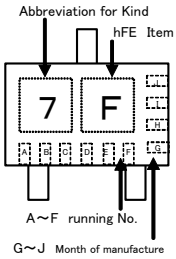
OUTLINE DRAWING

Unit:mm



JEITA:—
ISAHAYA:T-USM
TERMINAL CONNECTER
①:BASE
②:EMITTER
③:COLLECTOR

MARKING



MAXIMUM RATINGS(Ta=25℃)

Symbol	Parameter	Ratings	Unit
VCBO	Collector to Base voltage	−60	V
VEBO	Emitter to Base voltage	−6	V
VCEO	Collector to Emitter voltage	−50	V
IC	Collector current	−150	mA
PC	Collector dissipation	125(※)	mW
Tj	Junction temperature	125	℃
Tstg	Storage temperature	−55～125	℃

※package mounted on 9×19×1mm glass-epoxy substrate.

電気的特性(Ta=25℃)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Min	Min	
Collector to Emitter Breakdown voltage	V(BR)CEO	I_C=−100μA, R_{BE}=∞	−50	−	−	V
Collector cut off current	ICBO	V_{CB}=−60V, I_E=0mA	−	−	−0.1	μA
Emitter cut off current	IEBO	V_{EB}=−6V, I_C=0mA	−	−	−0.1	μA
DC forward current gain	hFE*	V_{CE}=−6V, I_C=−1mA	150	−	500	−
DC forward current gain	hFE	V_{CE}=−6V, I_C=−100μA	90	−	−	−
C to E saturation voltage	VCE(sat)	I_C=−100mA, I_B=−10mA	−	−	−0.3	V
Gain bandwidth product	fT	V_{CE}=−6V, I_E=10mA	−	200	−	MHz
Collector output capacitance	Cob	V_{CB}=−6V, I_E=0A, f=1MHz	−	3.0	−	pF

※ It shows hFE classification in below table

Item	E	F
hFE	150～300	250～500

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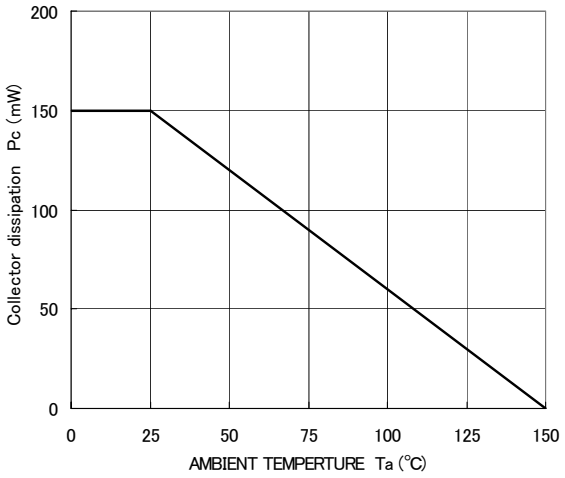
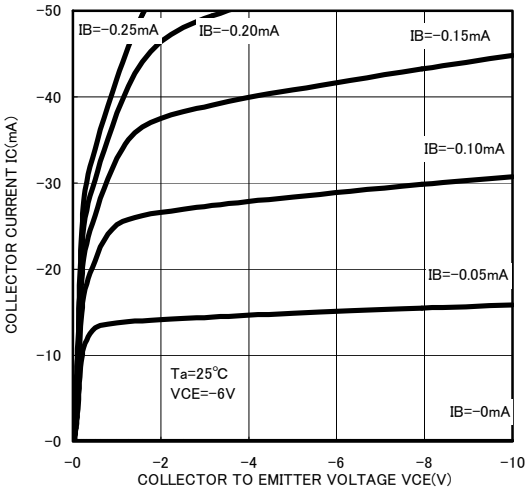
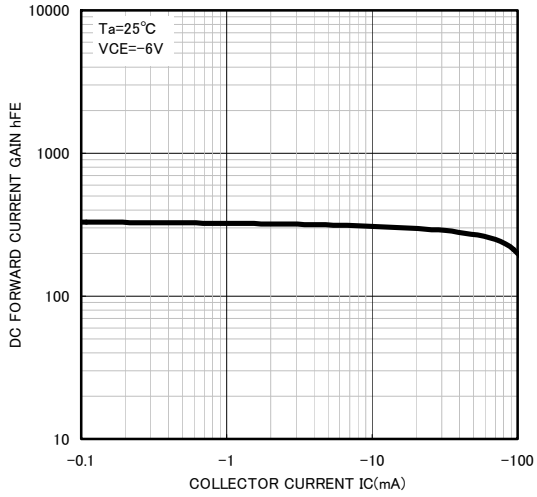
Collector dissipation—AMBIENT TEMPERTURE



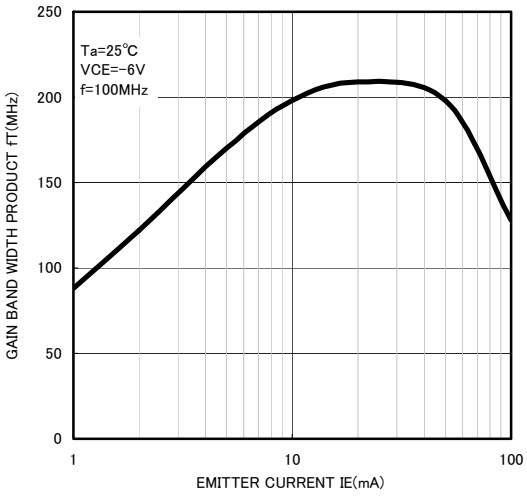
COMMON EMITTER OUTPUT



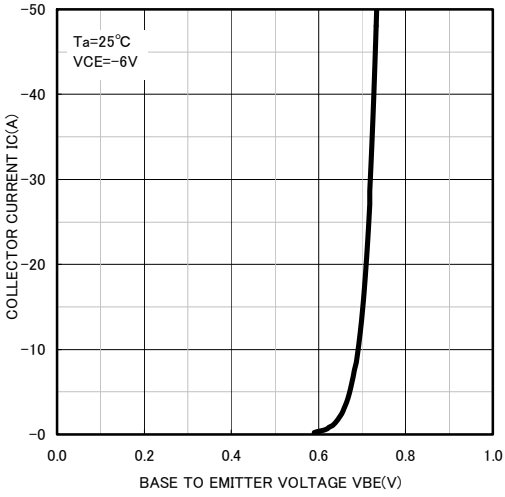
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



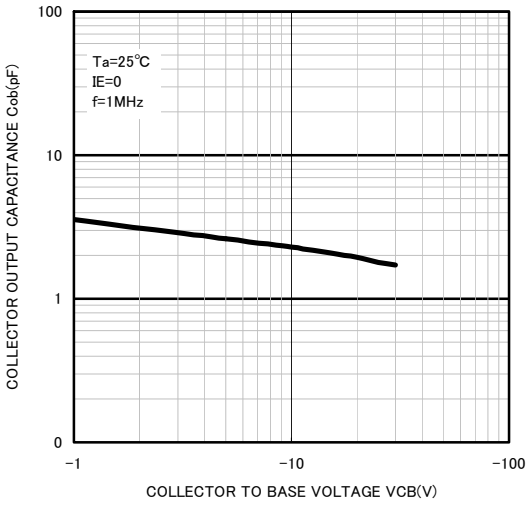
GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



COMMON EMITTER TRANSFER



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE



ISAHAYA ELECTRONICS CORPORATION

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