

ISA1530AC1 ISA1603AM1

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

ISA1530AC1 ISA1603AM1 is super mini package resin sealed silicon PNP epitaxial type transistor.

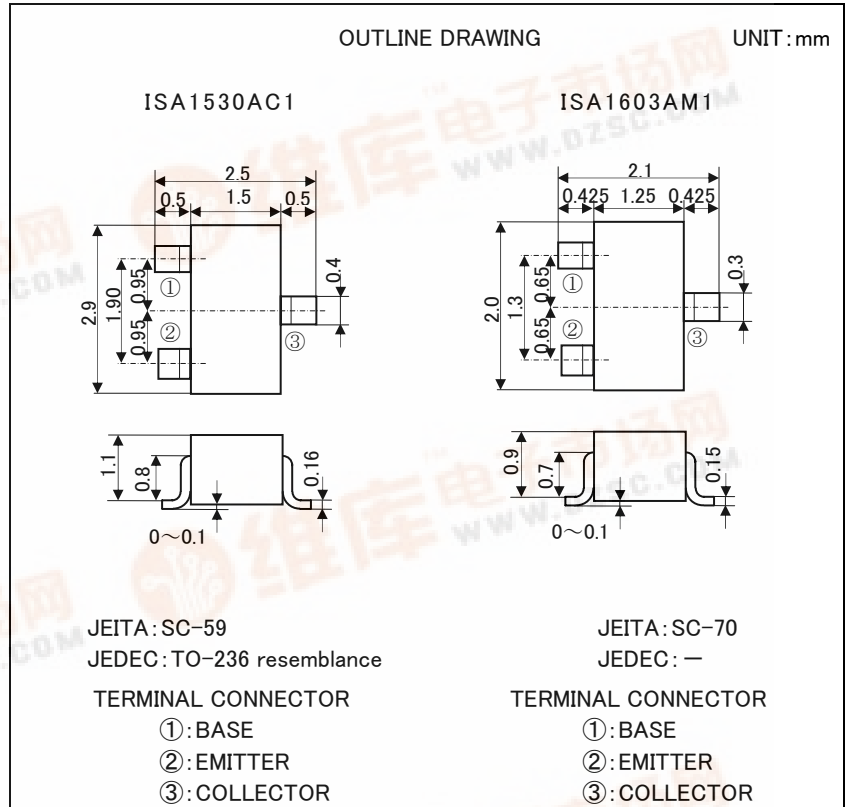
These are designed for low frequency voltage amplify application .

FEATURE

- Excellent linearity of DC forward current gain.
- Small collector to emitter saturation voltage
VCE(sat)=-0.3Vmax

APPLICATION

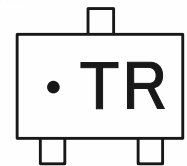
For small type machine low frequency voltage amplify application.



MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings		UNIT
		ISA1530AC1	ISA1603AM1	
V _{CBO}	Collector to Base voltage	-60		V
V _{EBO}	Collector to Emitter voltage	-6		V
V _{CEO}	Emitter to Base voltage	-50		V
I _C	Collector current	-150		mA
P _C	Collector dissipation	200		mW
T _j	Junction temperature	+150		°C
T _{stg}	Storage temperature	-55~+150		°C

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			UNIT
			Min	Ave	Max	
V _{(BR)CEO}	Collector to Emitter Breakdown voltage	I _C =-100 μA, R _{BE} =∞	-50			V
I _{CBO}	Collector cut off current	V _{CB} =-60V, I _E =0			-0.1	μA
I _{EBO}	Emitter cut off current	V _{EB} =-4V, I _C =0			-0.1	μA
h _{FE} *	DC forward current gain	V _{CE} =-6V, I _C =-1mA	120		560	-
h _{FE}	DC forward current gain	V _{CE} =-6V, I _C =-0.1mA	70			-
V _{CE(sat)}	Collector to Emitter saturation voltage	I _C =-100mA, I _B =-10mA			-0.3	V
f _T	Gain bandwidth product	V _{CE} =-6V, I _E =10mA		200		MHz
Cob	Collector output capacitance	V _{CB} =-6V, I _E =0, f=1MHz		4.0		pF
NF	Noise figure	V _{CE} =-6V, I _E =0.3mA f=100Hz, RG=10kΩ			20	dB

*:It shows hFE classification in below table.

	Q	R	S
hFE	120~270	180~390	270~560

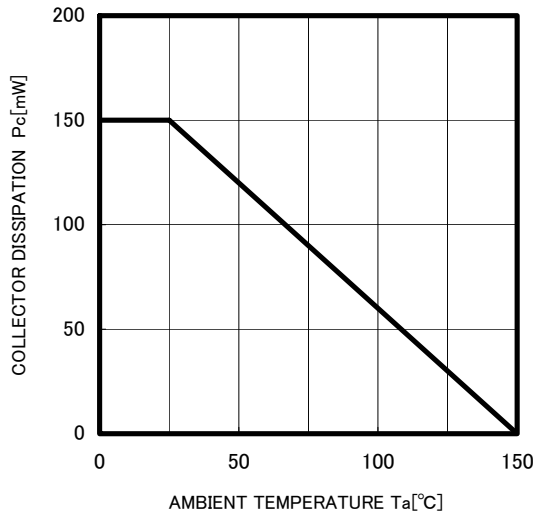


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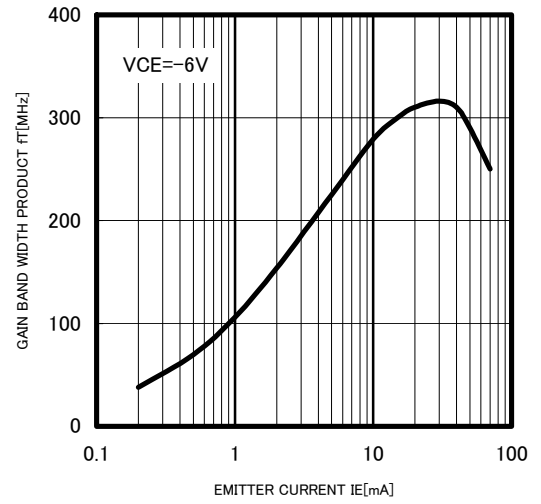
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TYPICAL CHARACTERISTICS

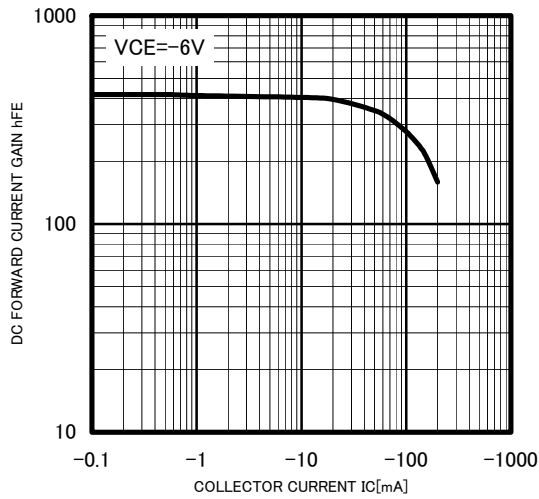
COLLECTOR DISSIPATION VS AMBIENT TEMPERATURE



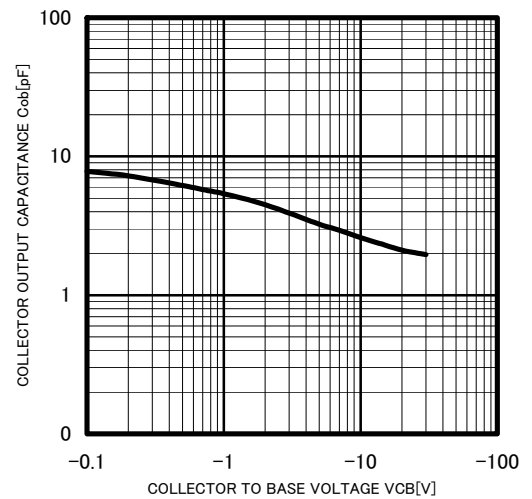
GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



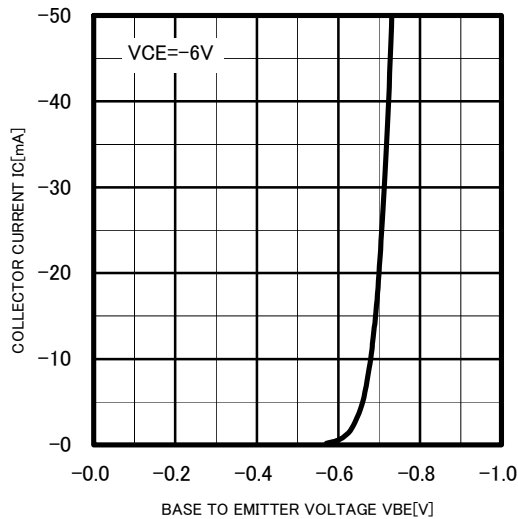
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE



COMMON EMITTER TRANSFER





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