



SANYO Semiconductors

DATA SHEET

PNP / NPN Epitaxial Planar Silicon Transistors

EC3101C / EC3201C — Low-Frequency General-Purpose Amplifier Applications

Features

- Ultraminiature package facilitates miniaturization in end products.

Specifications

() : EC3101C

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		(-)55	V
Collector-to-Emitter Voltage	V _{CEO}		(-)50	V
Emitter-to-Base Voltage	V _{EBO}		(-)6	V
Collector Current	I _C		(-)150	mA
Collector Current (Pulse)	I _{CP}		(-)300	mA
Base Current	I _B		(-)30	mA
Collector Dissipation	P _C		150	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)35V, I _E =0			(-)0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0			(-)0.1	μA
DC Current Gain	h _{FE}	V _{CE} =(-)6V, I _C =(-)1mA	200		600	
Gain-Bandwidth Product	f _T	V _{CE} =(-)6V, I _C =(-)10mA		(180)200		MHz
Output Capacitance	C _{ob}	V _{CB} =(-)6V, f=1MHz		(2.9)1.7		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)50mA, I _B =(-)5mA		(-0.12)0.08	(-)0.4	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)50mA, I _B =(-)5mA		(-)0.8	(-)1.0	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)10μA, I _E =0	(-)55			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =(-)1mA, R _{BE} =∞	(-)50			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =(-)10μA, I _C =0	(-)6			V

Marking EC3101C : G

EC3201C : H

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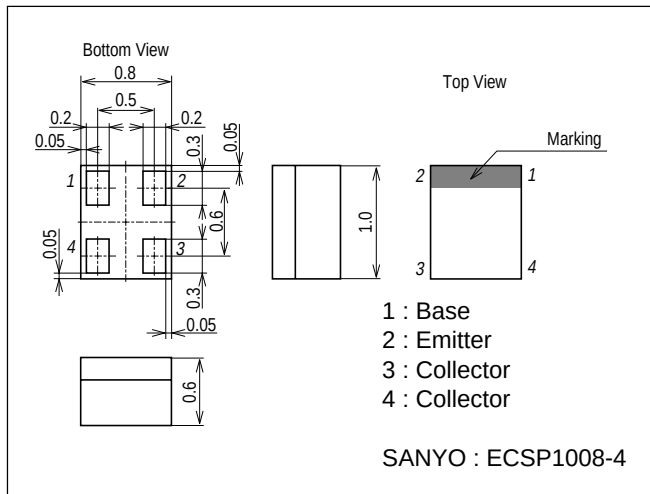
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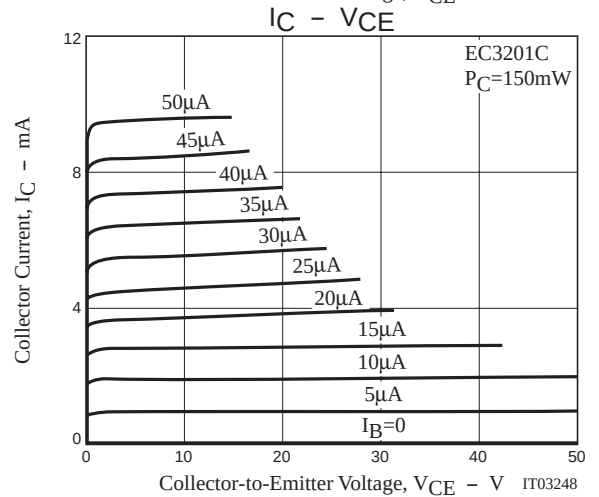
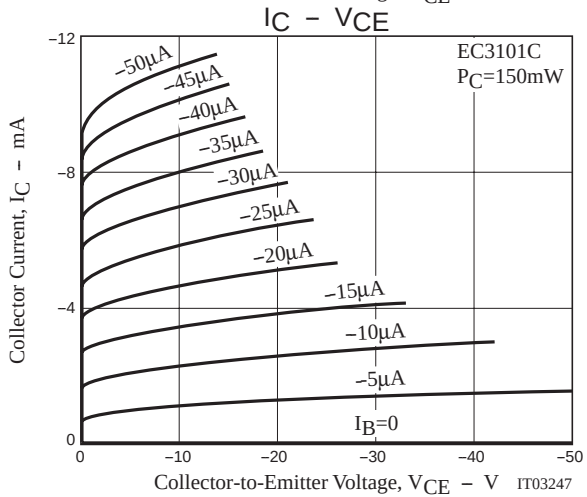
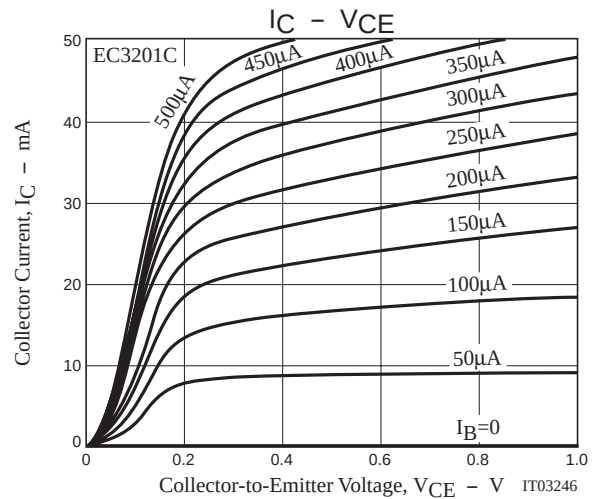
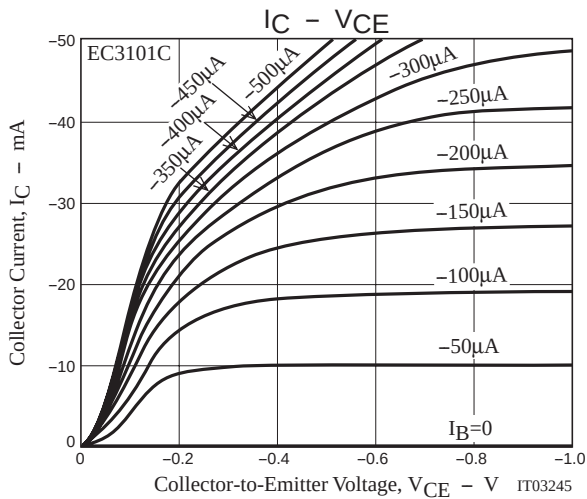
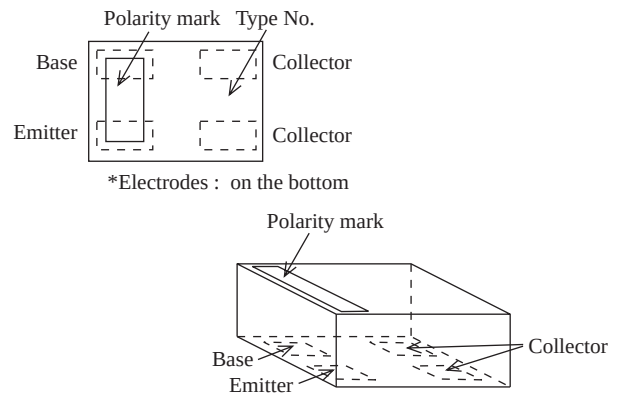
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Package Dimensions

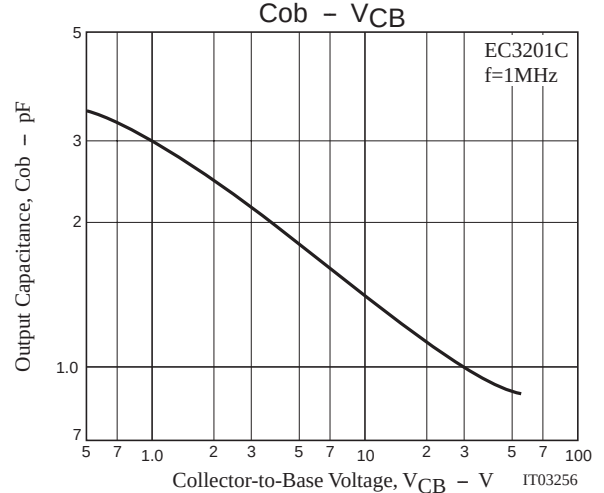
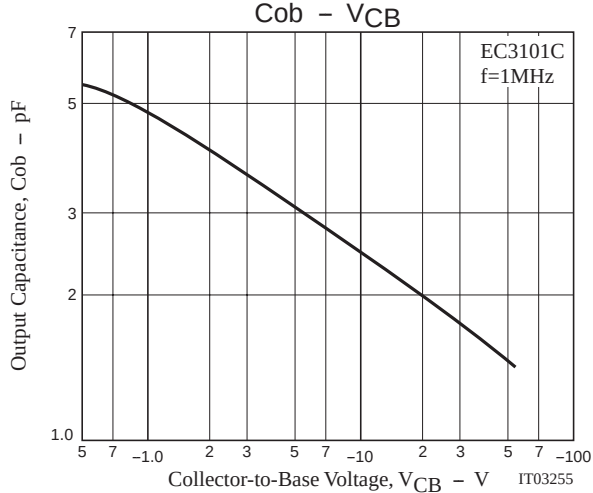
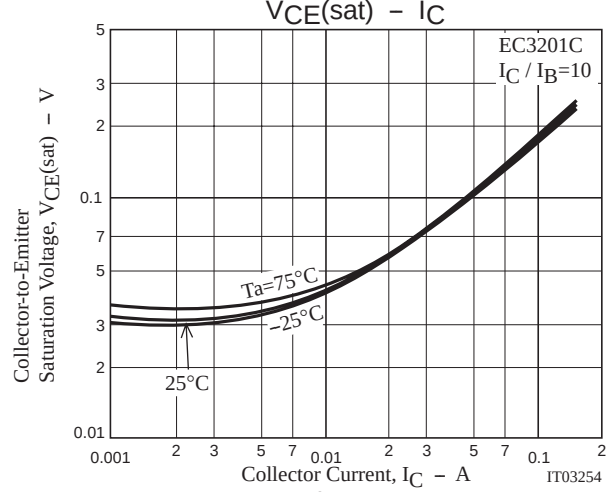
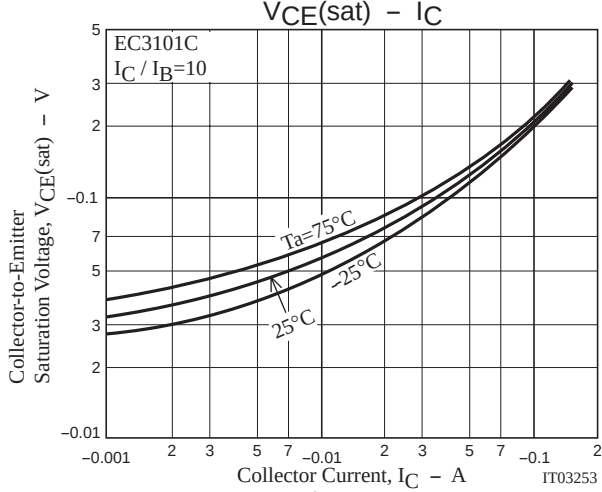
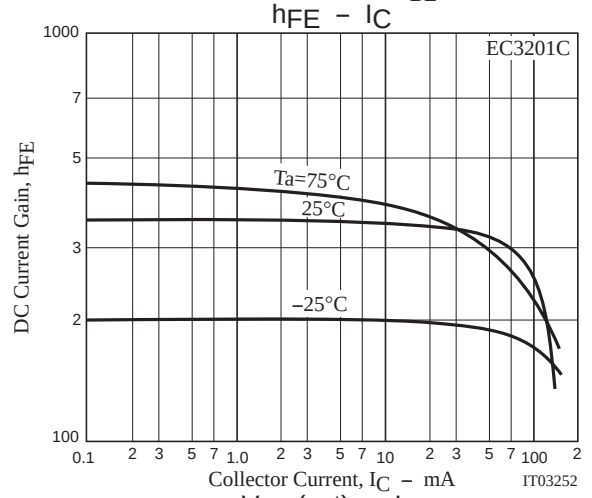
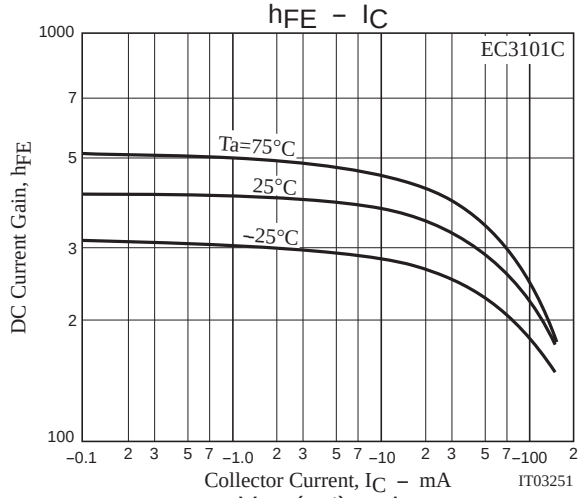
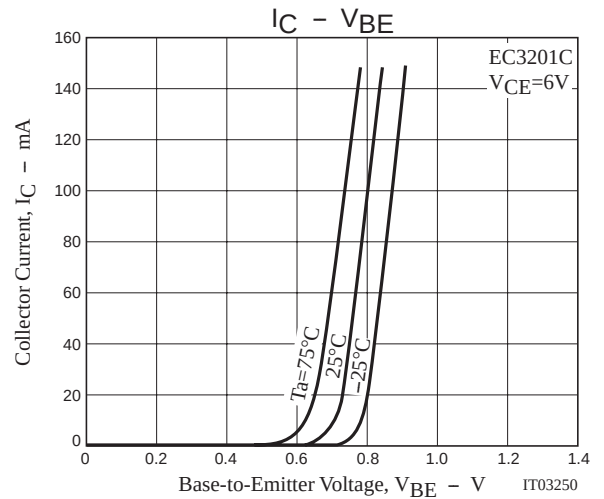
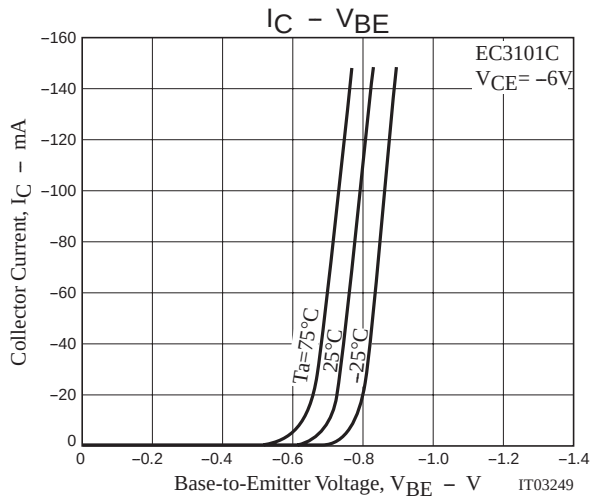
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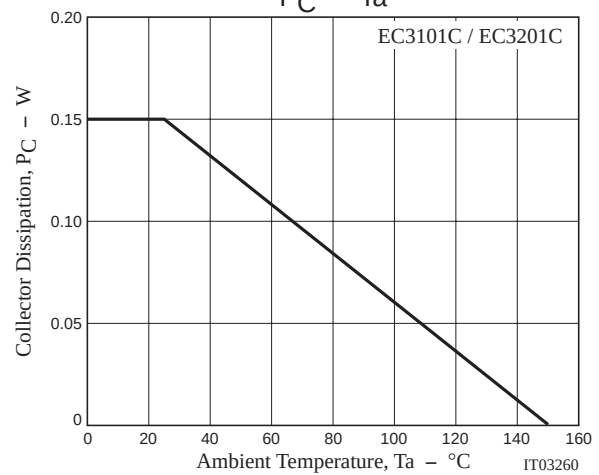
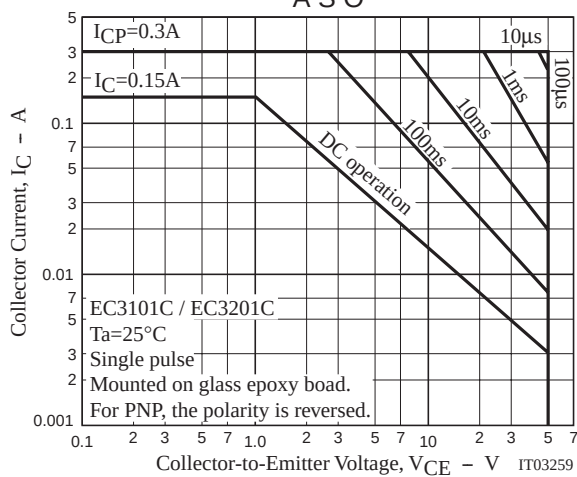
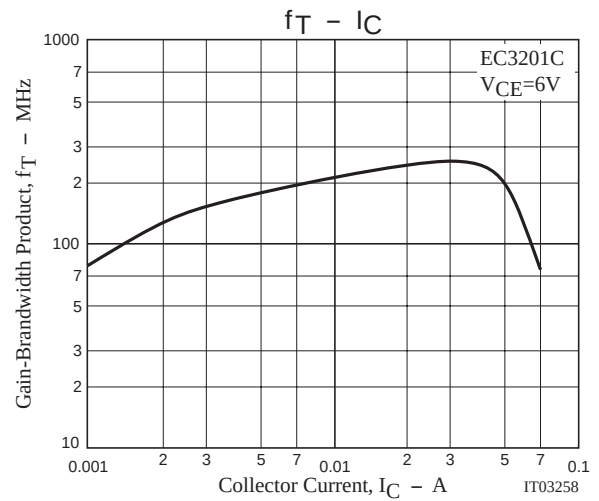
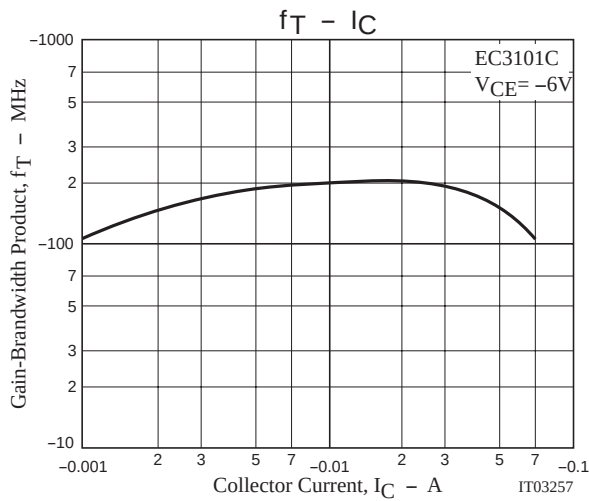
Electrical Connection (Top view)



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