



EC3101C / EC3201C

Low-Frequency General-Purpose Amplifier Applications

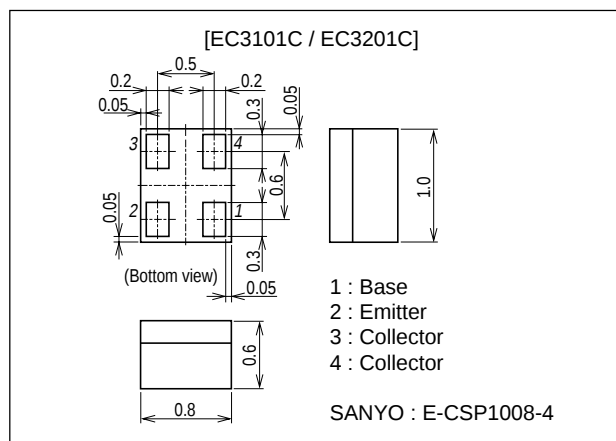
Features

- Ultraminiature package facilitates miniaturization in end products.

Package Dimensions

unit : mm

2184



Specifications

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Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		(-)55	V
Collector-to-Emitter Voltage	V _{CEO}		(-)50	V
Emitter-to-Base Voltage	V _{EB0}		(-)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

Marking EC3101C : G
EC3201C : H

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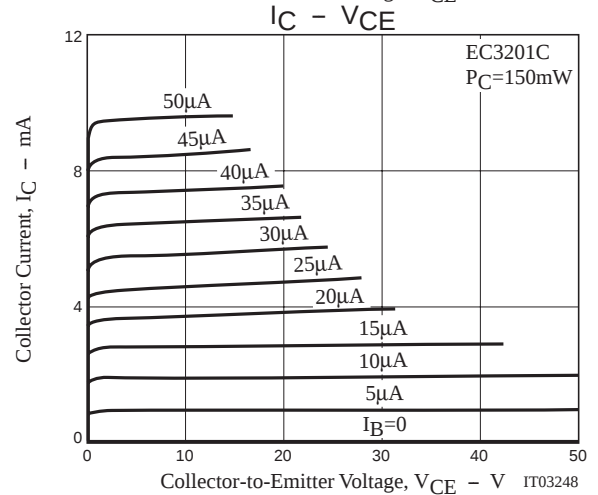
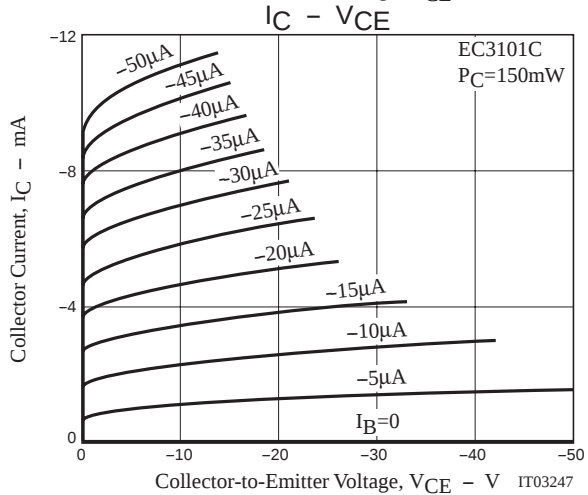
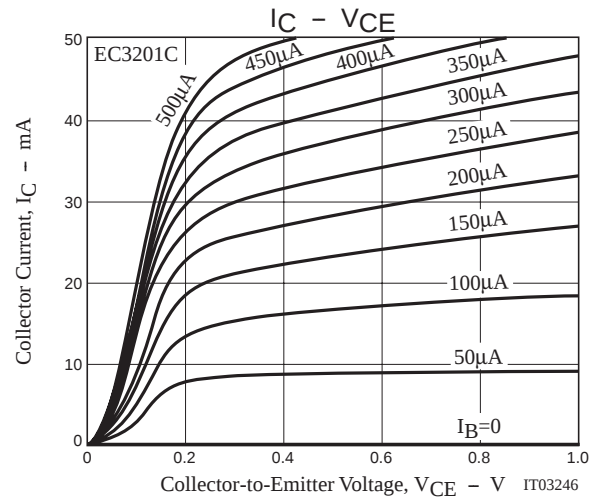
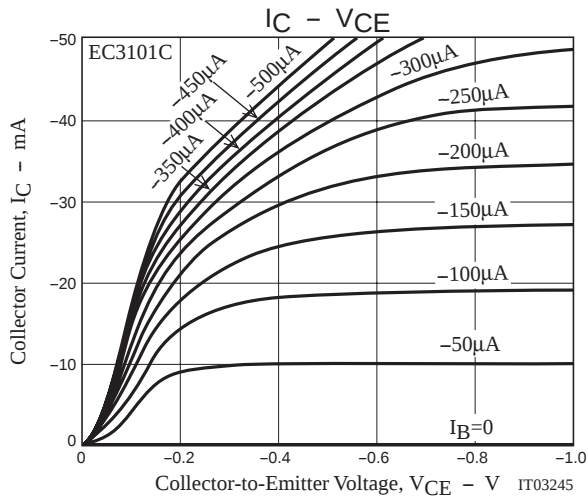
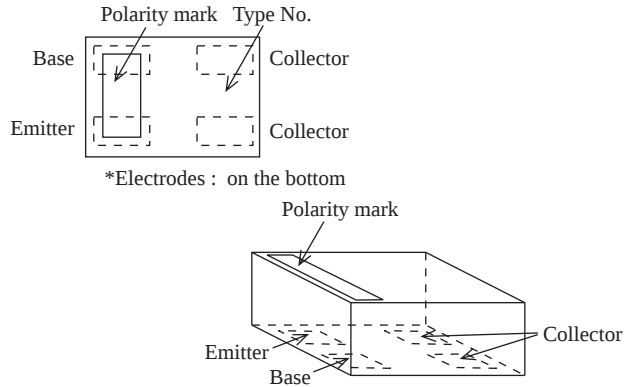
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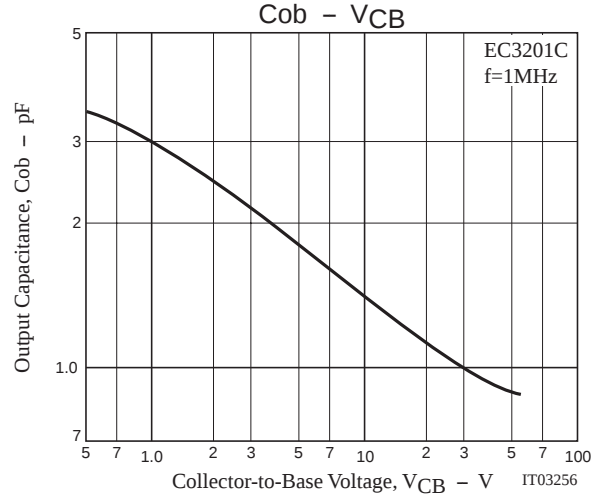
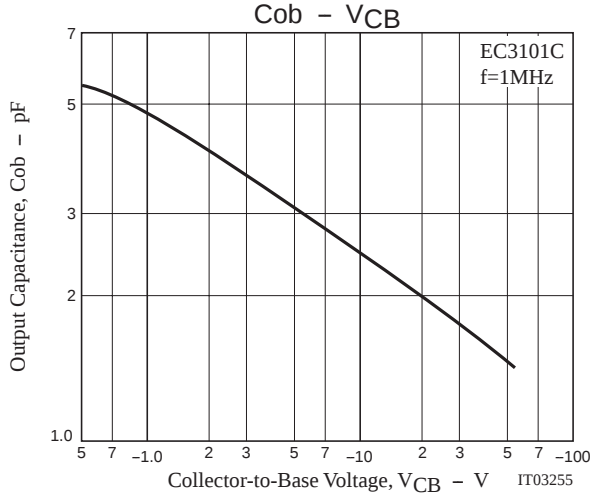
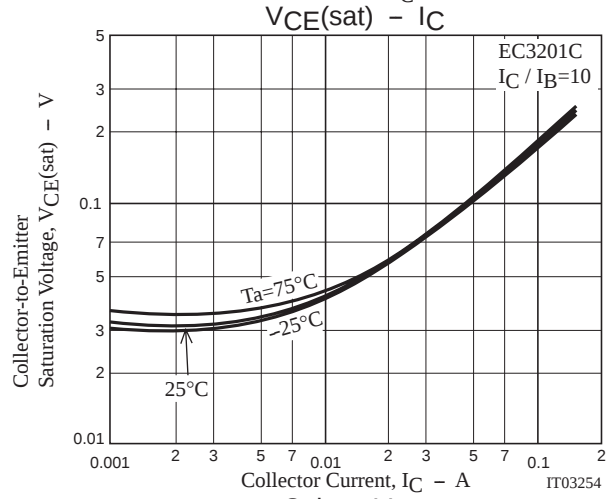
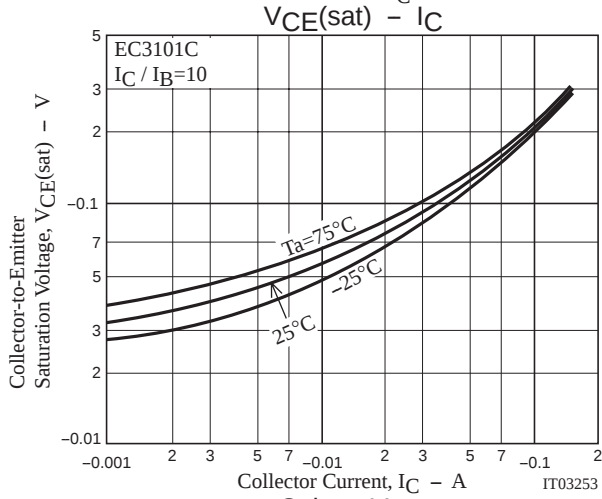
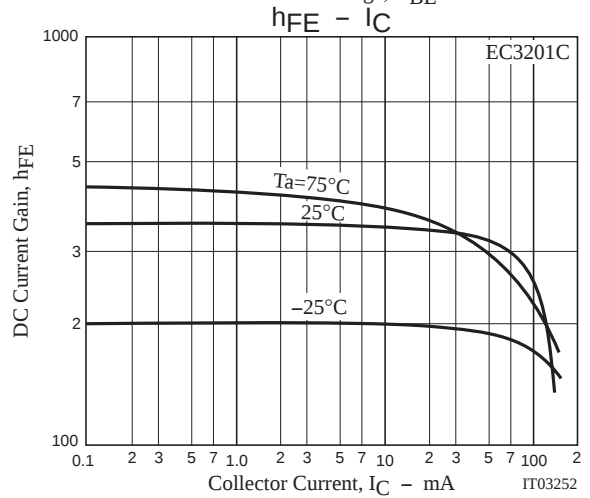
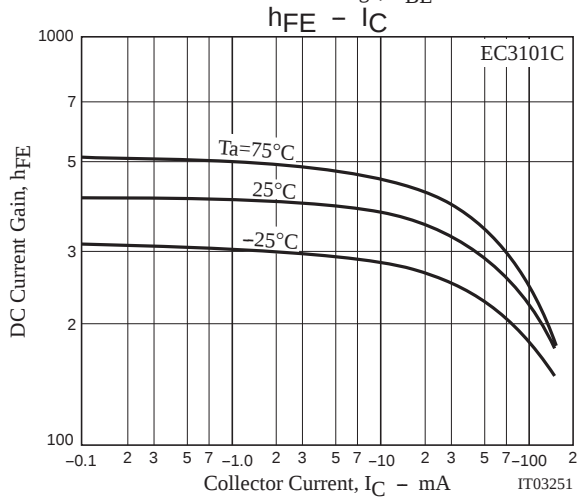
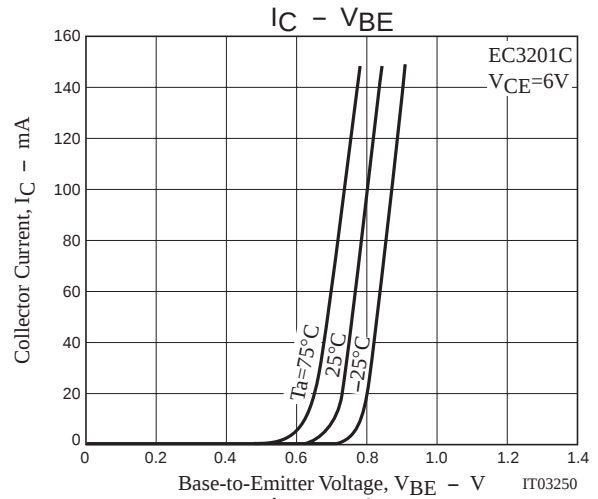
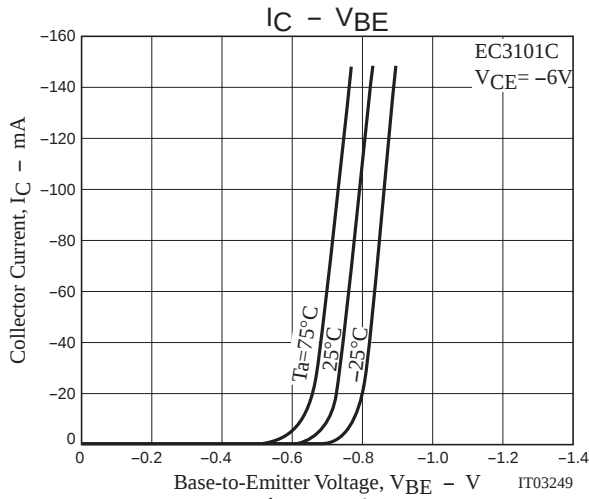
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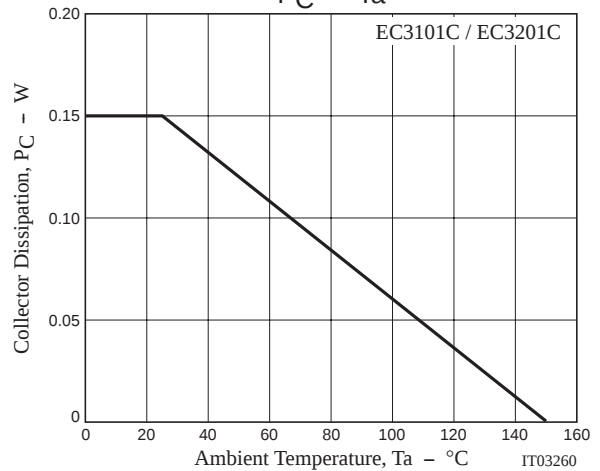
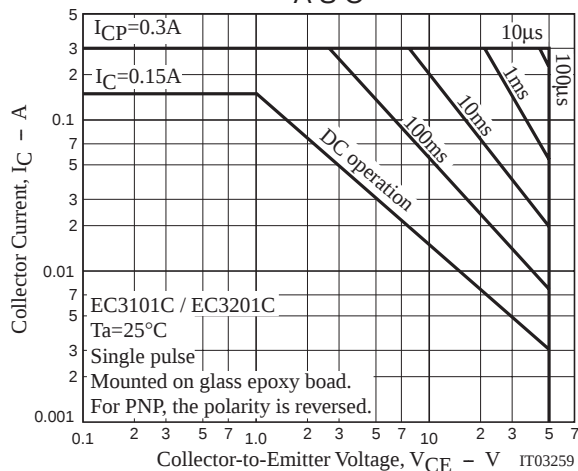
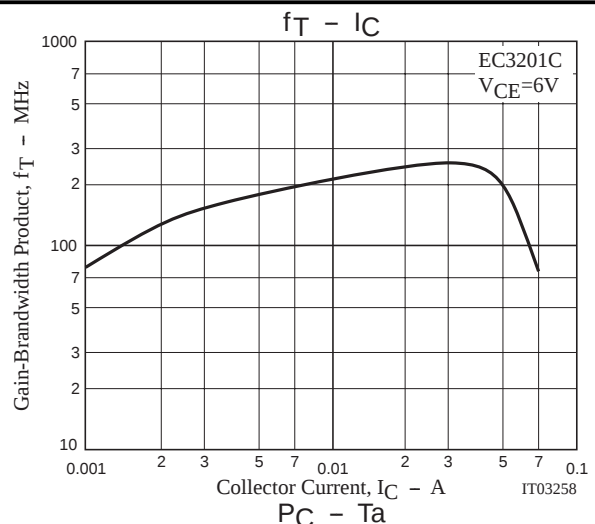
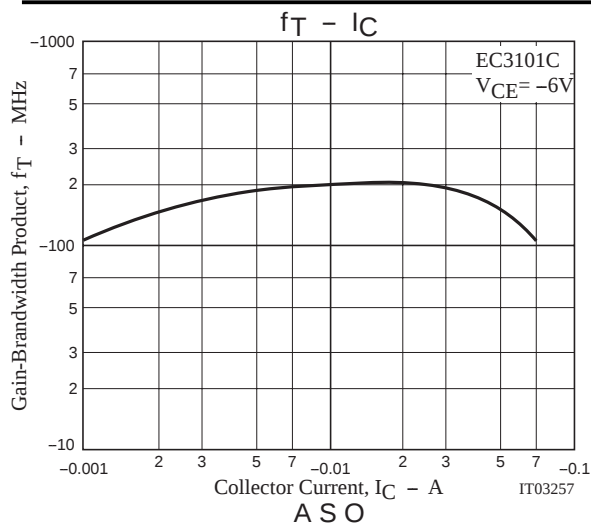
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)50mA$, $I_B=(-)5mA$		$(-0.12)0.08$	$(-)0.4$	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)50mA$, $I_B=(-)5mA$		$(-)0.8$	$(-)1.0$	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A$, $I_E=0$	$(-)55$			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA$, $R_{BE}=\infty$	$(-)50$			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A$, $I_C=0$	$(-)6$			V

Electrical Connection (Top view)



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