



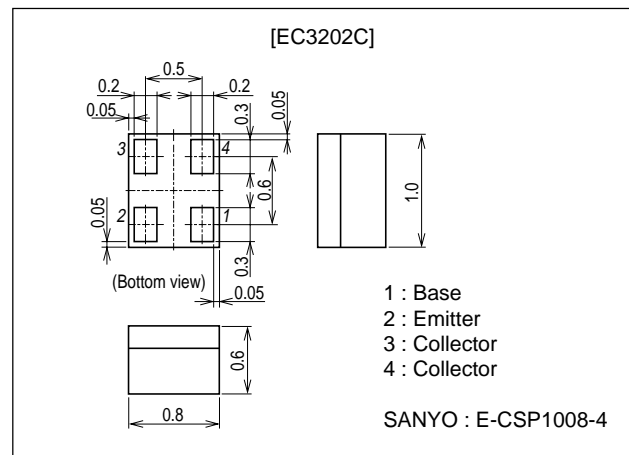
Muting Circuit Applications

Features

- Ultrasmall-sized package, facilitates miniaturization in end products.
- Low output capacitance.
- Low collector-to-emitter saturation voltage.
- Low ON-resistance.

Package Dimensions

unit : mm
2184



Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		25	V
Collector-to-Emitter Voltage	V _{CEO}		15	V
Emitter-to-Base Voltage	V _{EB0}		5	V
Collector Current	I _C		100	mA
Collector Current (Pulse)	I _{CP}		200	mA
Base Current	I _B		20	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 _{CB0}	V _{CB} =15V, I _E =0			0.1	μA
Emitter Cutoff Current	I _{EB0}	V _{EB} =4V, I _C =0			0.1	μA
DC Current Gain	h _{FE}	V _{CE} =2V, I _C =5mA	800		3200	
Gain-Bandwidth Product	f _T	V _{CE} =5V, I _C =10mA		240		MHz
Output Capacitance	C _{ob}	V _{CB} =10V, f=1MHz		3		pF

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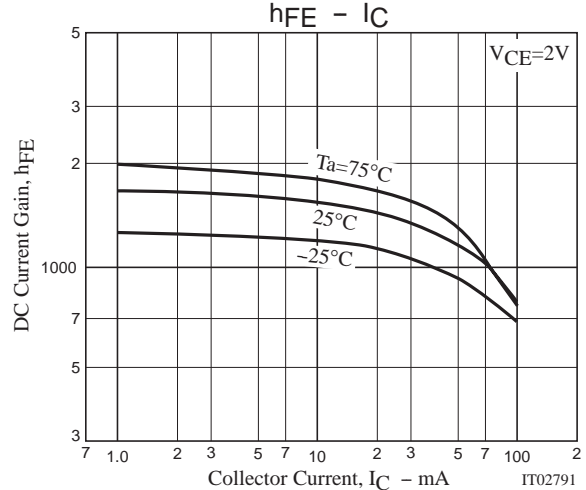
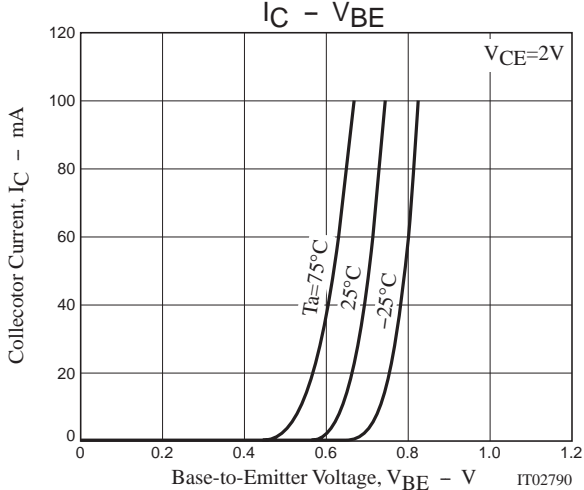
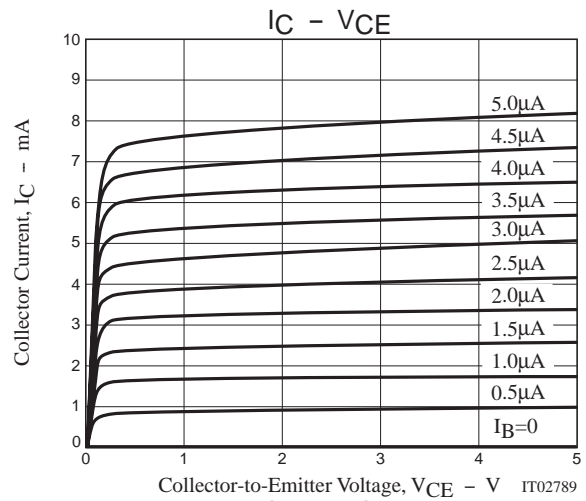
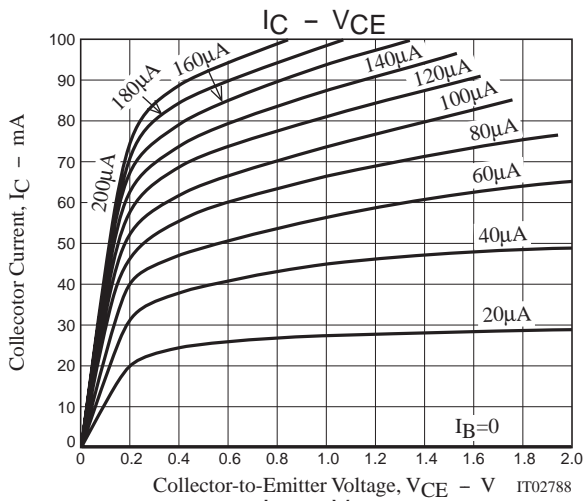
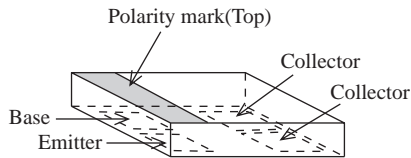
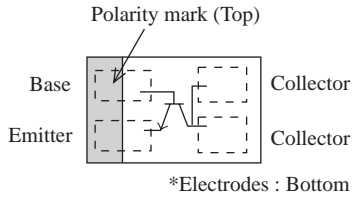
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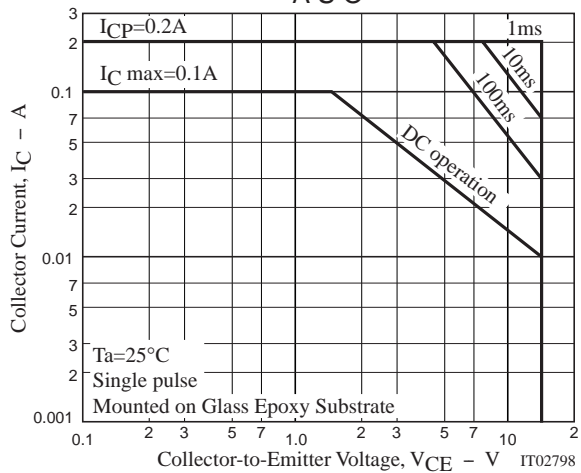
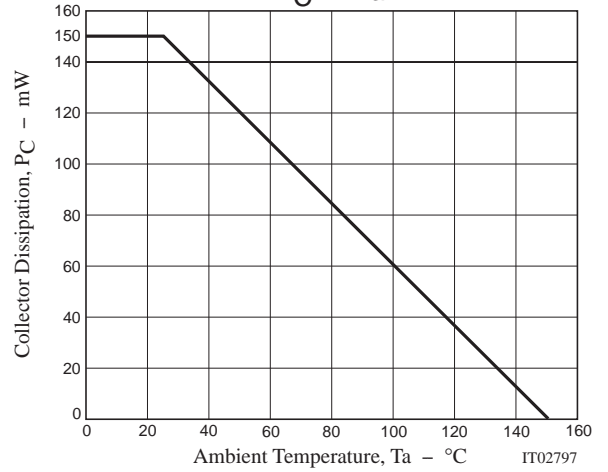
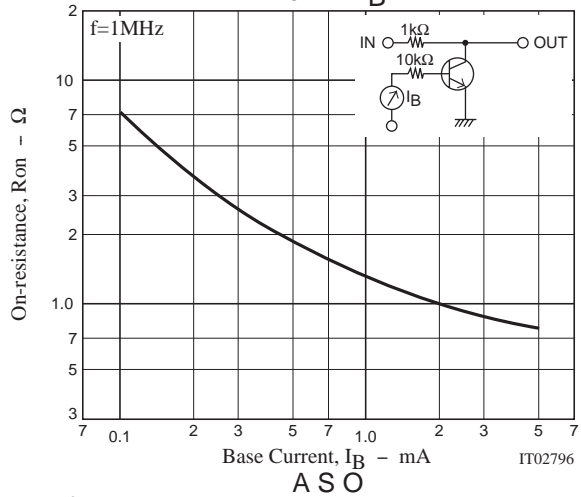
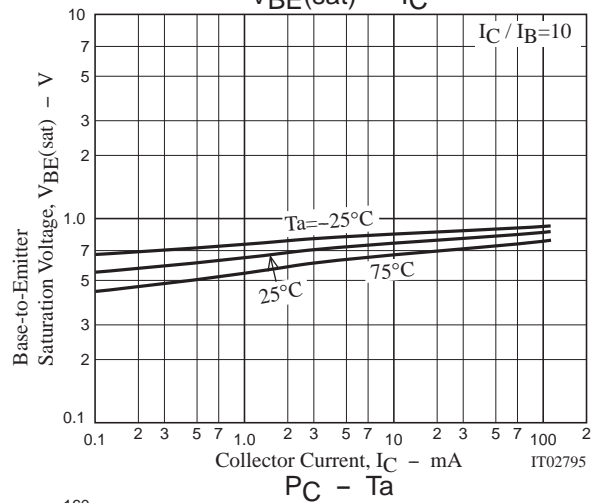
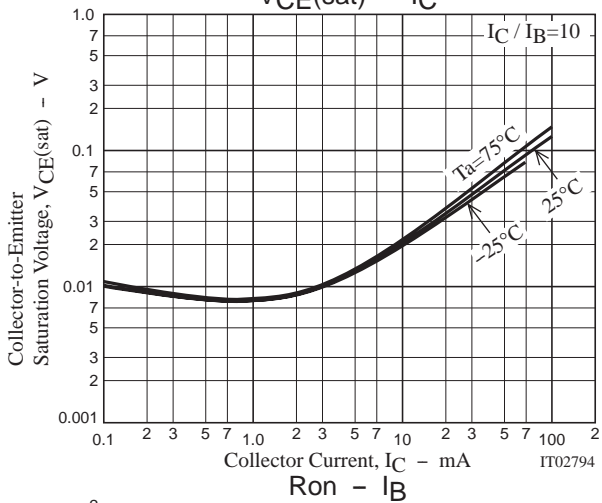
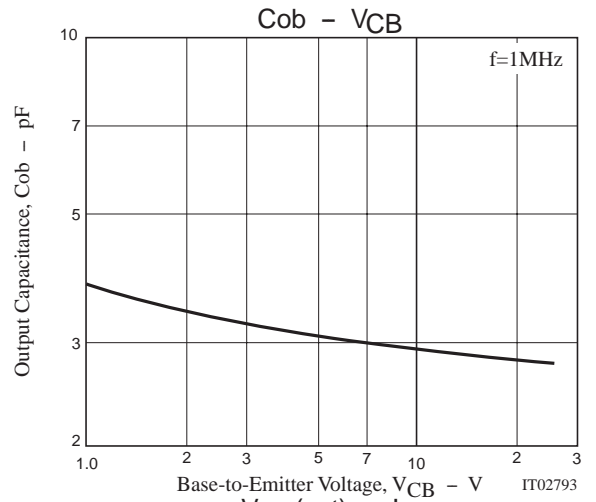
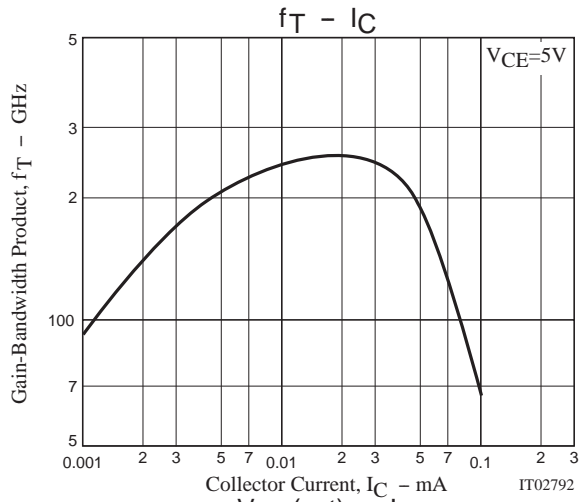
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$		14	30	mV
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$		0.74	1.1	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$	25			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	15			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$	5			V
On-Resistance	R_{on}	$I_B=3mA, f=1MHz$		0.9		Ω

Electrical Connection (Top view)



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