



# **Muting Circuit Applications**

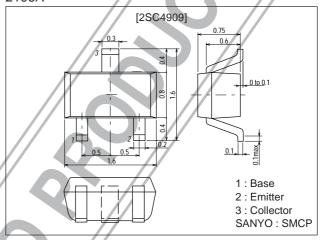
#### **Features**

- · Ultrasmall package permitting applied sets to be small and slim.
- · Small output capacitance.
- · Low collector-to-emitter saturation voltage.
- · Small ON-resistance.

## **Package Dimensions**

unit:mm

2106A



## **Specifications**

#### **Absolute Maximum Ratings** at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		25	V
Collector-to-Emitter Voltage	VCEO		15	V
Emitter-to-Base Voltage	VEBO		5	V
Collector Current	l <sub>C</sub>		100	mA
Collector Current (Pulse)	I <sub>CP</sub>		200	mA
Base Current	lв		20	mA
Collector Dissipation	Pc		150	mW
Junction Temperature	Τį	//	150	°C
Storage Temperature	Tstg	//	-55 to +150	°C

### Electrical Characteristics at Ta = 25°C

		/ /				
Parameter	Symbol	Conditions	Ratings			Unit
i aiailietei			min	typ	max	Offic
Collector Cutoff Current	I <sub>CBO</sub>	$V_{CB}$ =15V, $I_E$ =0			0.1	μA
Emitter Cutoff Current	IEBO	V <sub>EB</sub> =4V, I <sub>C</sub> =0			0.1	μA
DC Current Gain	h <sub>PE</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =5mA	800		3200	
Gain-Bandwidth Product	/f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =10mA		240		MHz
Output Capacitance	Cob	V <sub>CB</sub> =10V, f=1MHz		1.4		pF

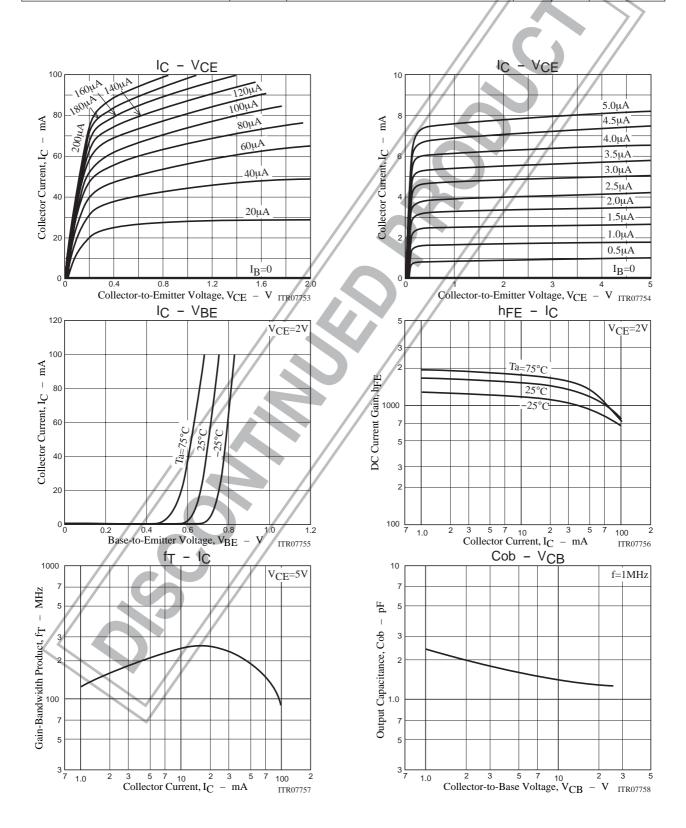
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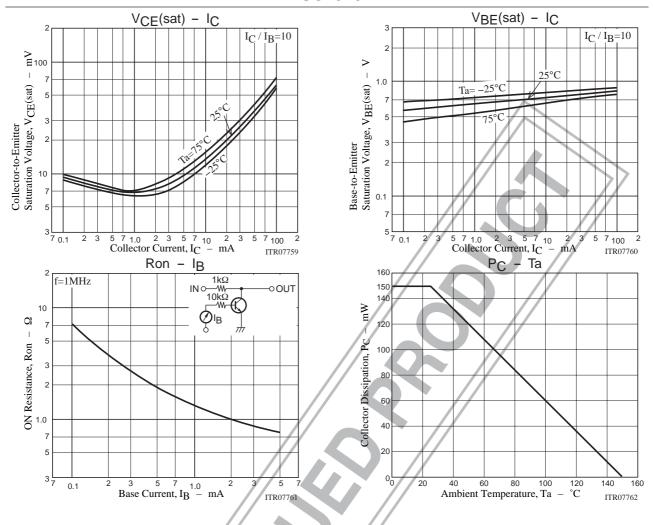
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Parameter	Symbol	Conditions		Unit		
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Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA		14	30	mV
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA		0.74	1.1	V
Collector-to-Base Breakdown Voltage	V <sub>(BR)</sub> CBO	I <sub>C</sub> =10μA, I <sub>E</sub> =0	25			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =1mA, R <sub>BE</sub> =∞	15			V
Emitter-to-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =10μA, I <sub>C</sub> =0	5			V
ON Resistance	Ron	I <sub>B</sub> =3mA, f=1MHz		0.9		Ω



#### 2SC4919



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