Ordering number : ENA1086

SANYO Semiconductors
DATA SHEET

2SC4919-S — NPN Epitaxial Planar Silicon Transistor
Muting Circuit Applications

Features

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

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		25	V
Collector-to-Emitter Voltage	V_{CEO}		15	V
Emitter-to-Base Voltage	V_{EBO}		15	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	Tj		150	°C
Storage Temperature	Tstg		-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}=15V, I_E=0A			0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V, I_C=0A			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	Cob	V_{CB}=10V, f=1MHz		1.4		pF

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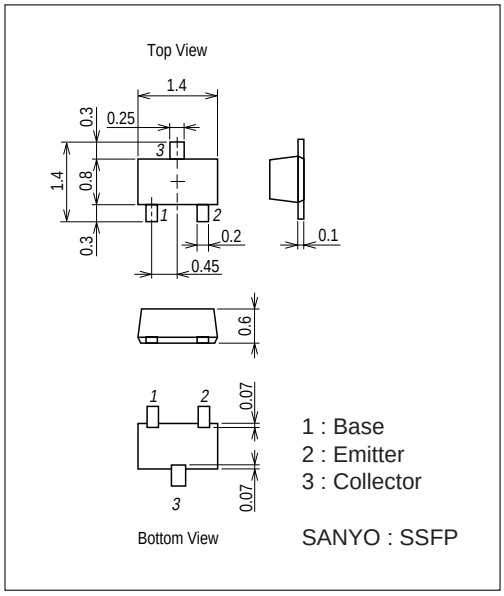
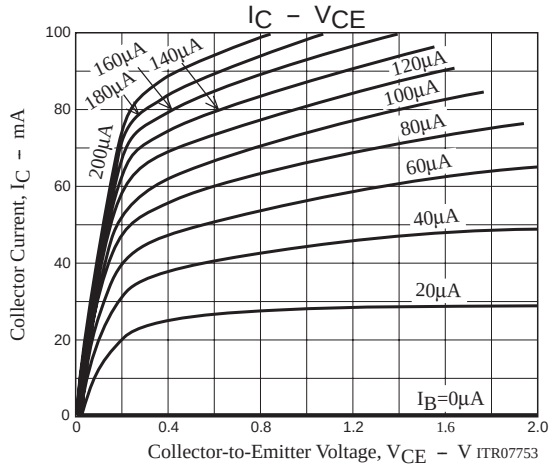
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	V_{CE}(sat)	I_C=10mA, I_B=1mA		14	30	mV
Base-to-Emitter Saturation Voltage	V_{BE}(sat)	I_C=10mA, I_B=1mA		0.74	1.1	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=10μA, I_E=0A	25			V
Collector-to-Emitter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

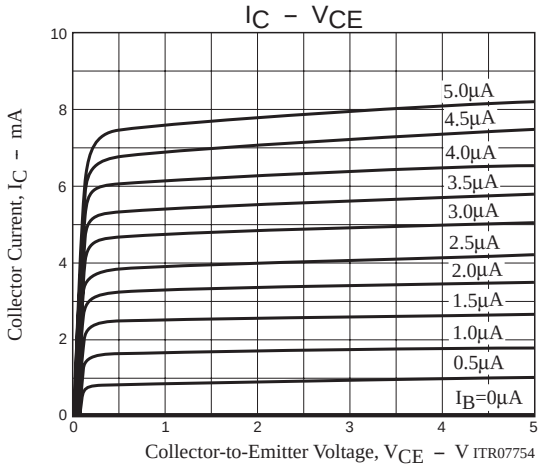
Package Dimensions

unit : mm (typ)

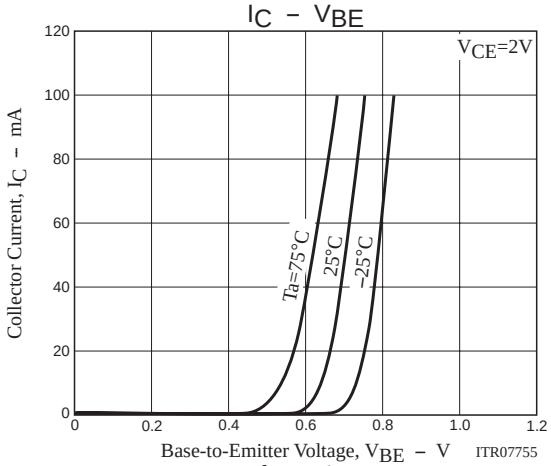
7029-002



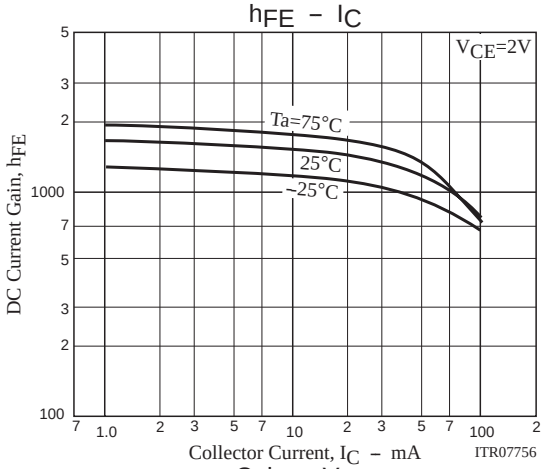




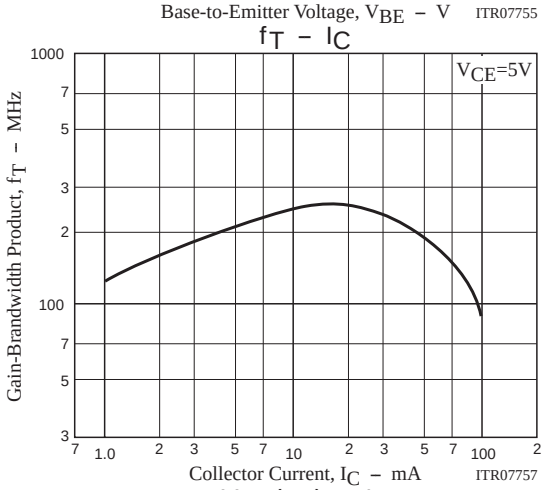
I_C – V_{BE}



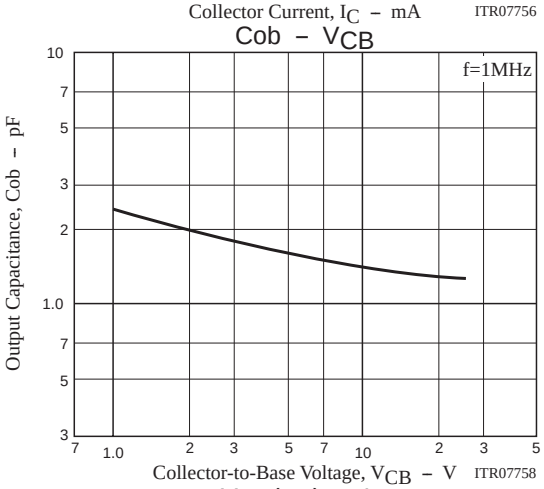
h_{FE} – I_C



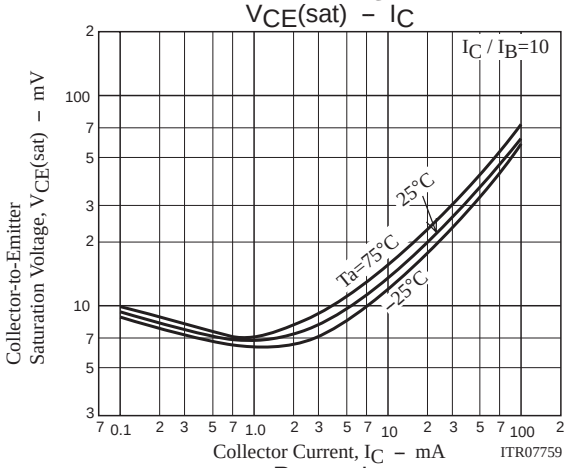
f_T – I_C



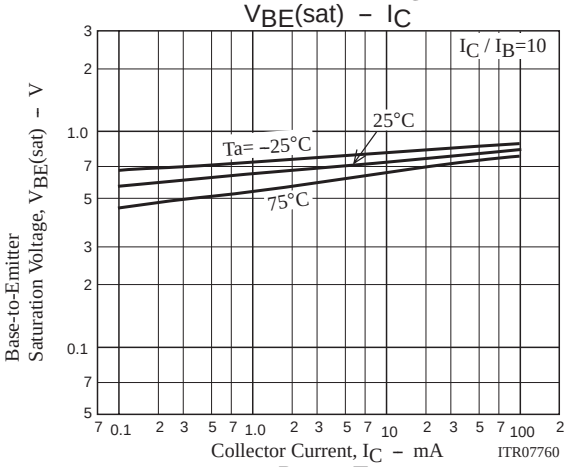
Cob – V_{CB}



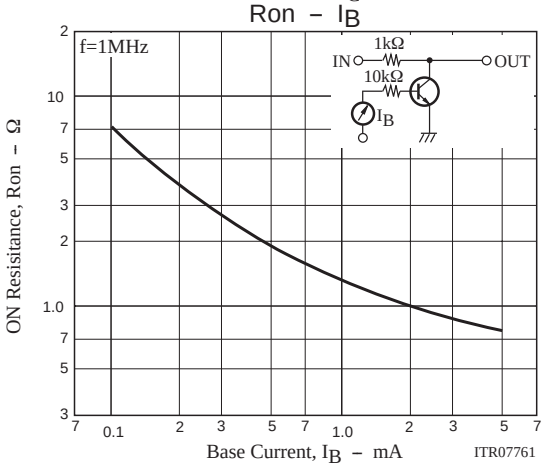
V_{CE}(sat) – I_C



V_{BE}(sat) – I_C



Ron – I_B



P_C – Ta