Ordering number: EN5031

SANYO

No.5031

2SA1965

PNP Epitaxial Planar Silicon Transistor

Muting Circuit Applications

Features

- Very small-sized package permitting 2SA1965-applied sets to be made small and slim.
- Small output capacitance.
- Low collector-to-emitter saturation voltage.
- Small ON resistance.

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V_{CBO}	−15	V
Collector-to-Emitter Voltage	V_{CEO}	−10	V
Emitter-to-Base Voltage	V_{EBO}	−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	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

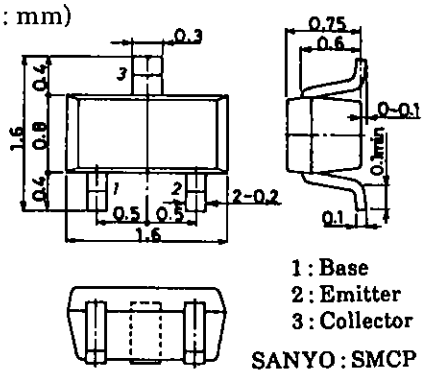
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=-12V, I_E=0$			−0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-4V, I_C=0$			−0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=-2V, I_C=-5mA$	200		600	
Gain-Bandwidth Product	f_T	$V_{CE}=-5V, I_C=-10mA$		600		MHz
Output Capacitance	Cob	$V_{CB}=-10V, f=1MHz$		5.0		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=-10mA, I_B=-1mA$		−16	−35	mV
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=-10mA, I_B=-1mA$		−0.75	−1.1	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	−15			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1mA, R_{BE}=\infty$	−10			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	−5			V
ON Resistance	Ron	$I_B=-3mA, f=1MHz$		1.2		Ω

Marking: KA

Package Dimensions 2106A

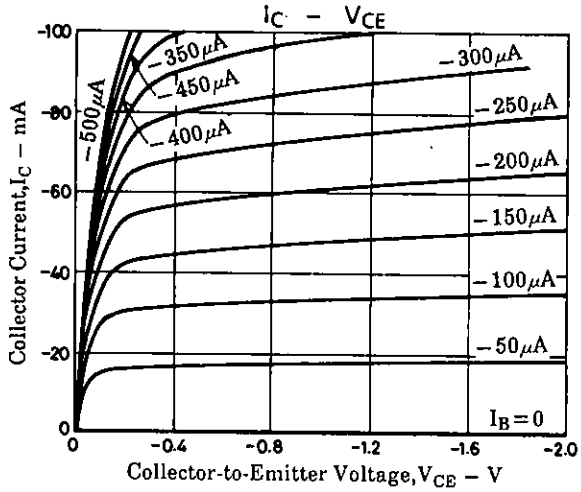
(unit: mm)



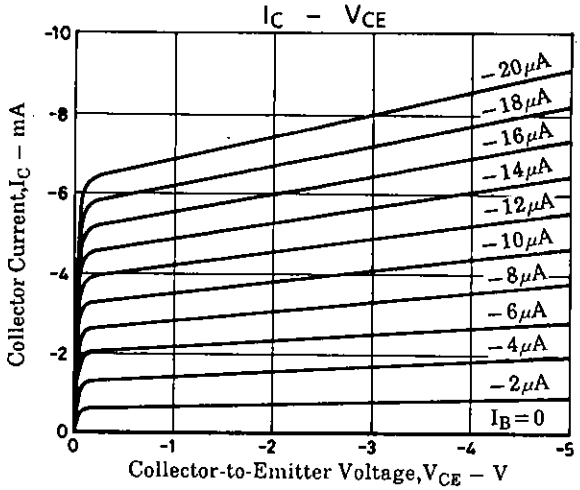
1: Base
2: Emitter
3: Collector

SANYO: SMCP

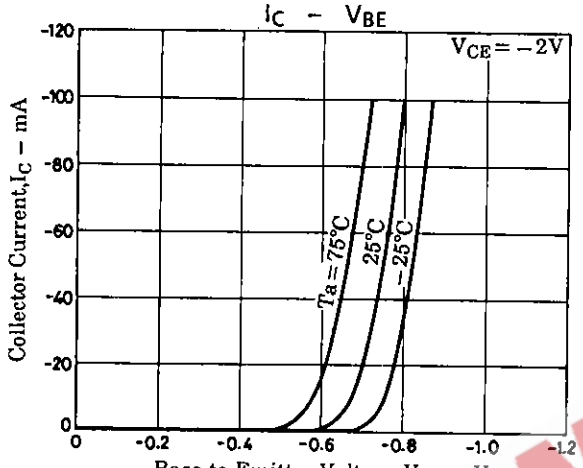
I_C – V_{CE}



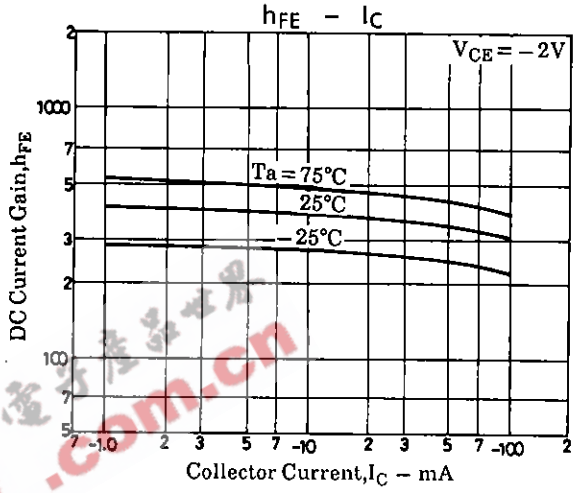
I_C – V_{CE}



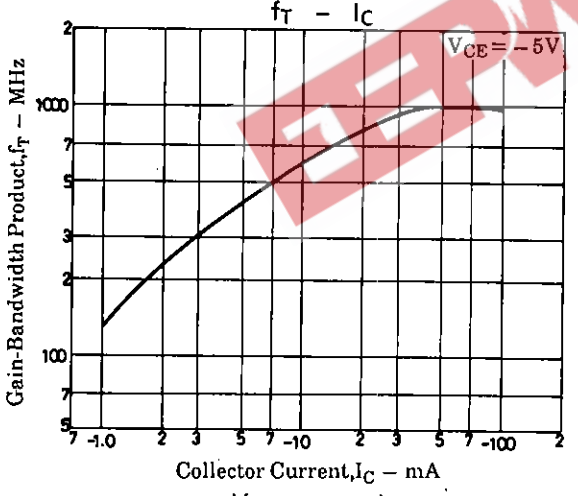
I_C – V_{BE}



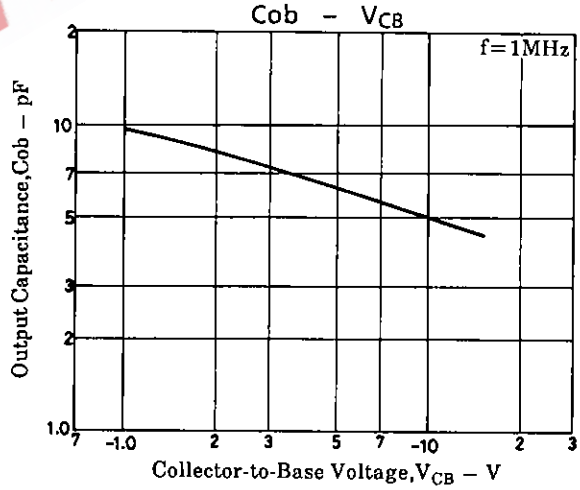
h_{FE} – I_C



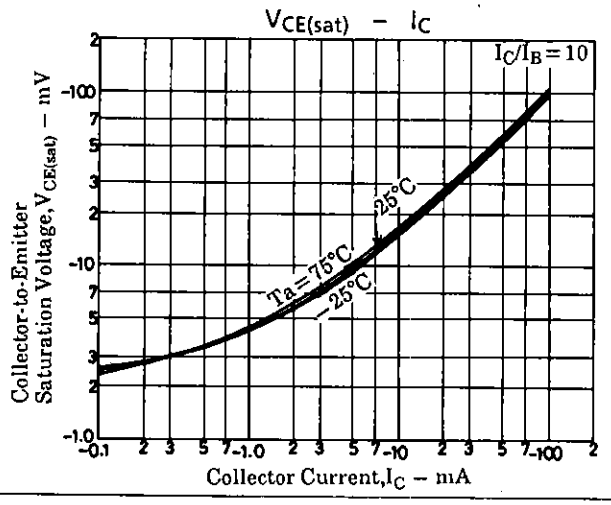
f_T – I_C



Cob – V_{CB}



$V_{CE(sat)}$ – I_C



$V_{BE(sat)}$ – I_C