Ordering number: EN 2923

SANYO

No.2923

2SC4413

NPN Epitaxial Planar Silicon Transistor

Low-Frequency General-Purpose Amp Applications

Features

- Very small-sized package permitting the 2SC4413-applied sets to be made small and slim
- Adoption of FBET process
- High DC current gain
- Low collector to emitter saturation voltage
- High V_{EBO}
- Small c_{ob}

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	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

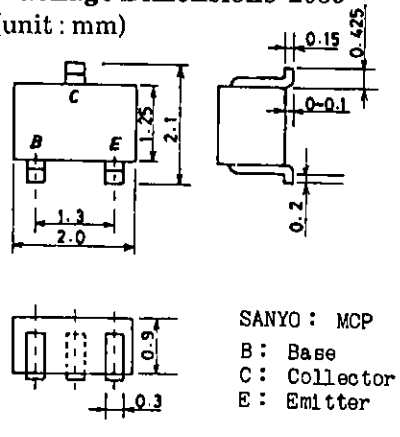
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 40V, I_E = 0			0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 10V, I_C = 0			0.1	μA
DC Current Gain	h_{FE}	V_{CE} = 5V, I_C = 10mA	800	1500	3200	
Gain-Bandwidth Product	f_T	V_{CE} = 10V, I_C = 10mA		200		MHz
Output Capacitance	c_{ob}	V_{CB} = 10V, f = 1MHz		1.5		pF
C-E Saturation Voltage	$V_{CE(sat)}$	I_C = 50mA, I_B = 1mA		0.1	0.5	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C = 50mA, I_B = 1mA		0.8	1.1	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C = 10μA, I_E = 0	60			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C = 1mA, R_{BE} = ∞	50			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_E = 10μA, I_C = 0	15			V

Marking : GY

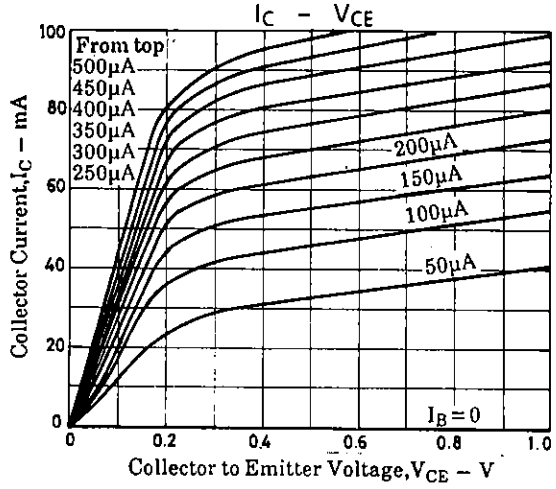
Package Dimensions 2059

(unit : mm)

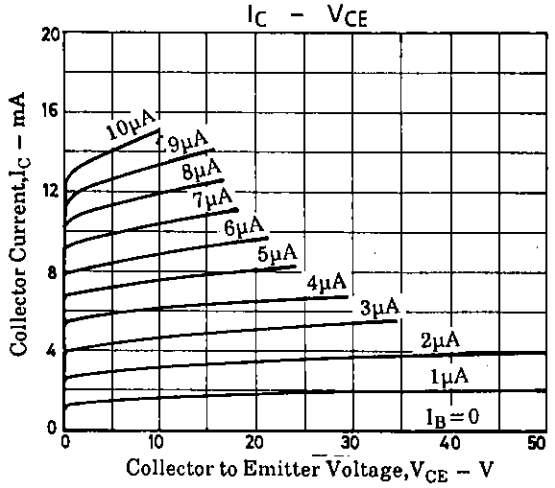


SANYO : MCP
B : Base
C : Collector
E : Emitter

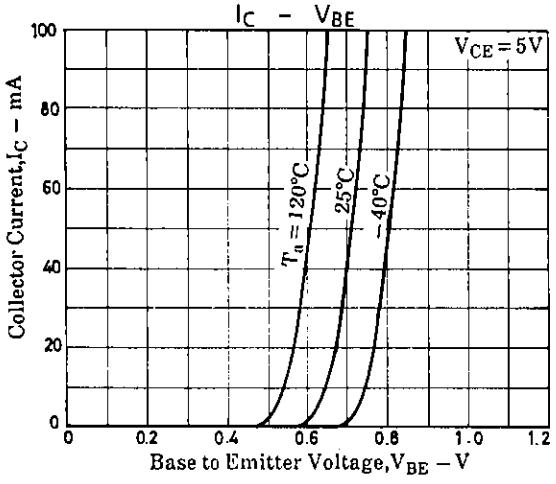
I_C – V_{CE}



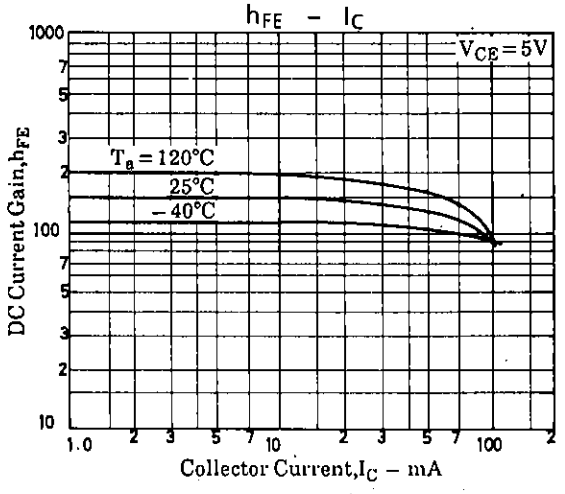
I_C – V_{CE}



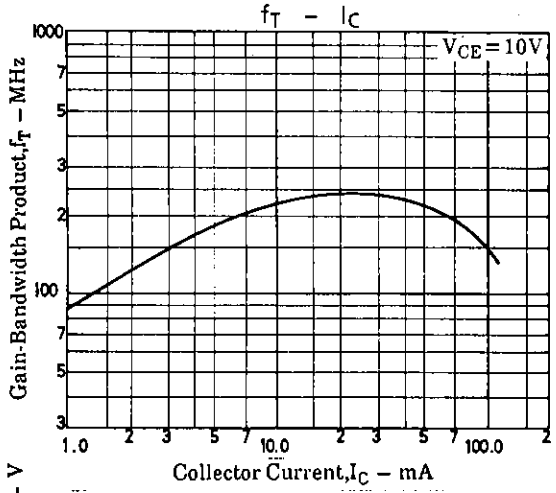
I_C – V_{BE}



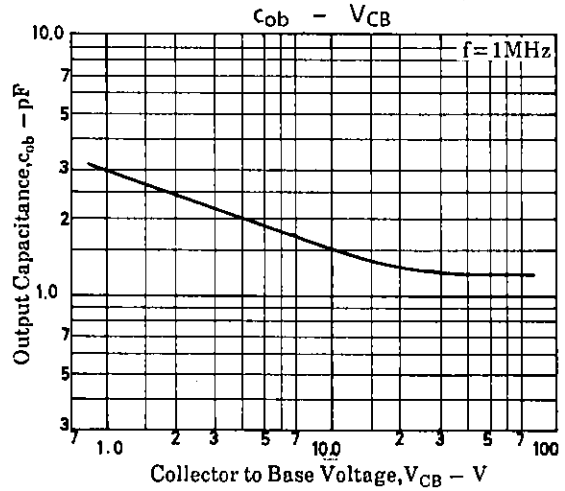
h_{FE} – I_C



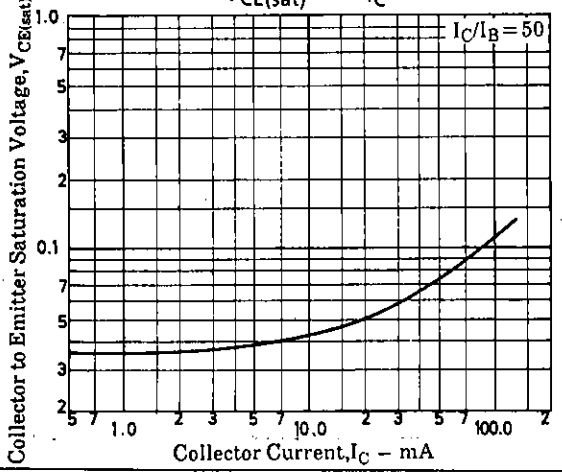
f_T – I_C



C_{ob} – V_{CB}



$V_{CE(sat)}$ – I_C



$V_{BE(sat)}$ – I_C