

SANYO	No.2970	2SC4272
	NPN Epitaxial Planar Silicon Transistor	
27MHz CB Transceiver Driver Applications		

Features

- Small size making it easy to provide high-density, small-sized hybrid ICs.

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector to Base Voltage	V _{CB0}	75	V
Collector to Emitter Voltage	V _{CER} R _{BE} = 150Ω	75	V
Collector to Emitter Voltage	V _{CEO}	45	V
Emitter to Base Voltage	V _{EBO}	5	V
Collector Current	I _C	1.0	A
Collector Current(Pulse)	I _{CP}	1.5	A
Collector Dissipation	P _C Mounted on ceramic board(250mm ² × 0.8mm)	1.3	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-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				1.0	μA
Emitter Cutoff Current	I _{EBO} V _{EB} = 4V, I _C = 0				1.0	μA
DC Current Gain	h _{FE} * V _{CE} = 5V, I _C = 500mA	60*			320*	
Gain-Bandwidth Product	f _T V _{CE} = 10V, I _C = 50mA	180	250			MHz
Output Capacitance	c _{ob} V _{CB} = 10V, f = 1MHz			15		pF
Output Power	P _o V _{CC} = 12V, f = 27MHz Pin = 35mW	1.0	1.8			W
Collector Efficiency	η _c See specified Test Circuit.	60				%
C-E Saturation Voltage	V _{CE(sat)} I _C = 500mA, I _B = 50mA		0.2	0.6		V
B-E Saturation Voltage	V _{BE(sat)} I _C = 500mA, I _B = 50mA		0.9	1.2		V
C-B Breakdown Voltage	V _{(BR)CBO} I _C = 10μA, I _E = 0	75				V
C-E Breakdown Voltage	V _{(BR)CER} I _C = 1mA, R _{BE} = 150Ω	75				V
C-E Breakdown Voltage	V _{(BR)CEO} I _C = 1mA, R _{BE} = ∞	45				V
E-B Breakdown Voltage	V _{(BR)EBO} I _E = 10μA, I _C = 0	5				V

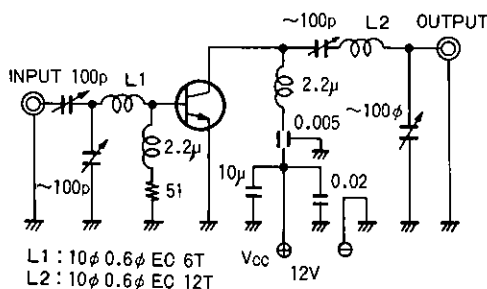
* : The 2SC4272 is classified by 500mA h_{FE} as follows :

60	D	120	100	E	200	160	F	320
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Marking : CH

h_{FE} rank : D, E, F

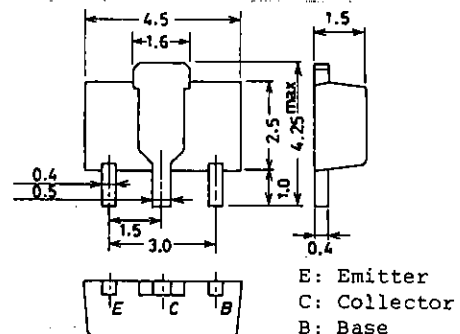
Collector Efficiency Test Circuit



L1 : 10φ 0.6φ EC 6T
L2 : 10φ 0.6φ EC 12T

Unit (Resistance : Ω, Capacitance : F)

Package Dimensions 2038
(unit : mm)

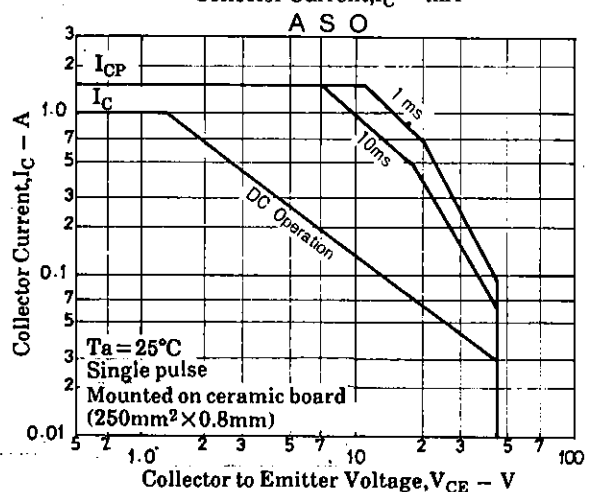
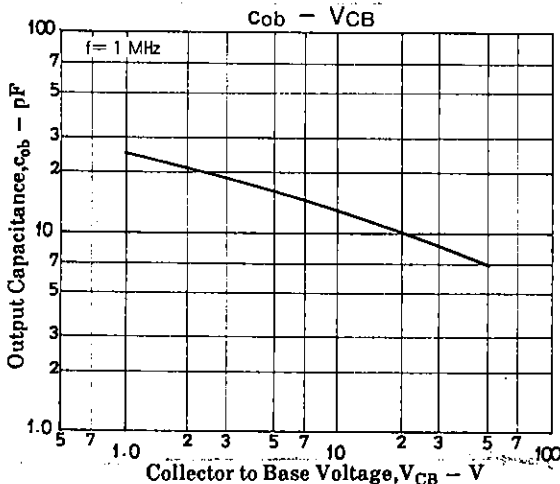
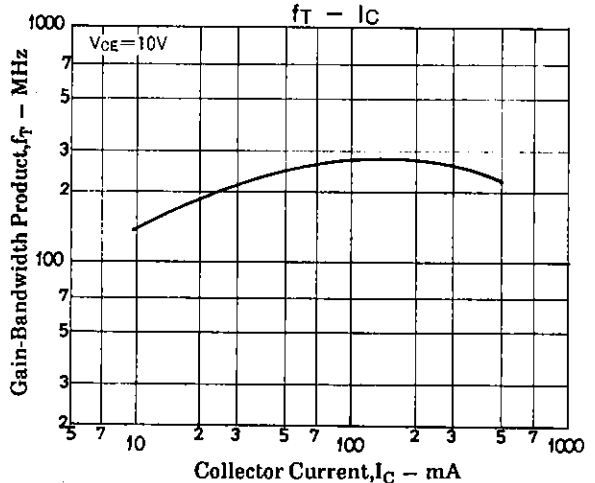
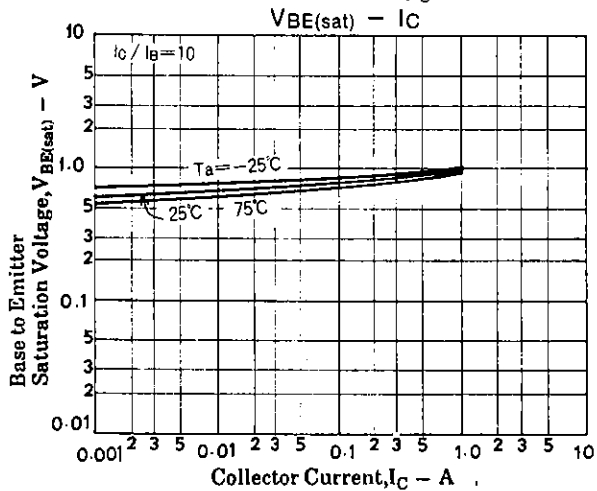
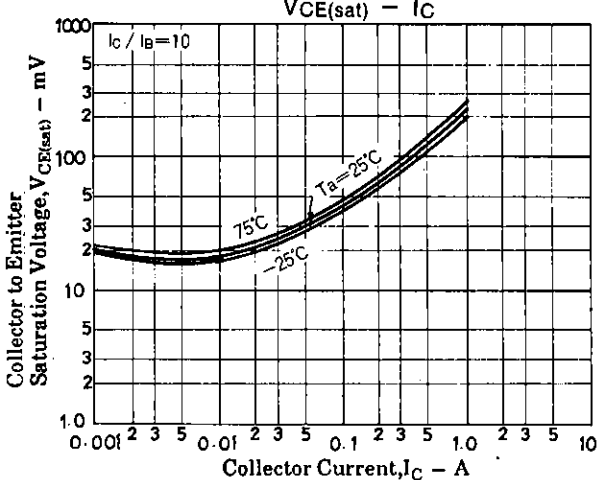
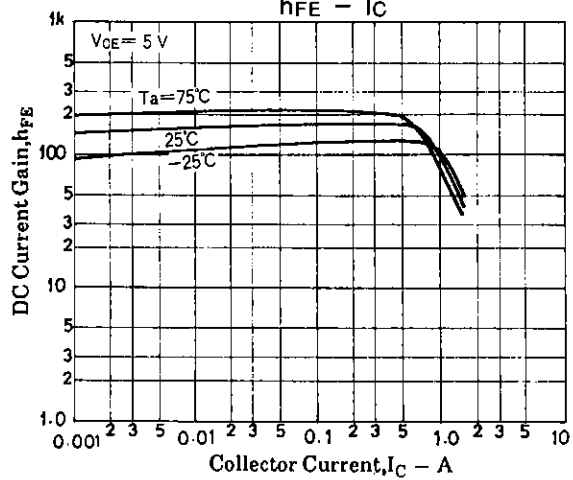
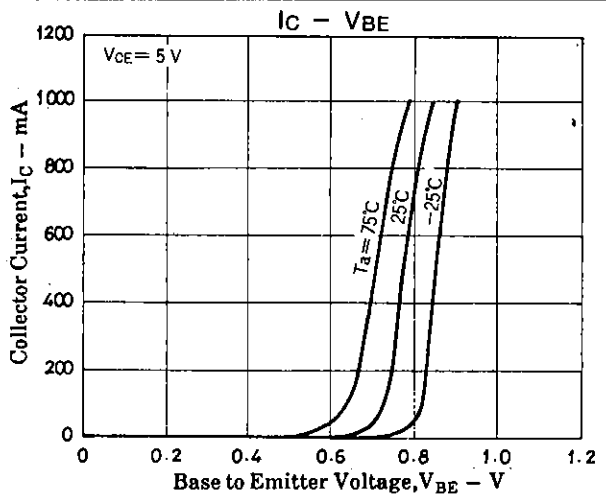
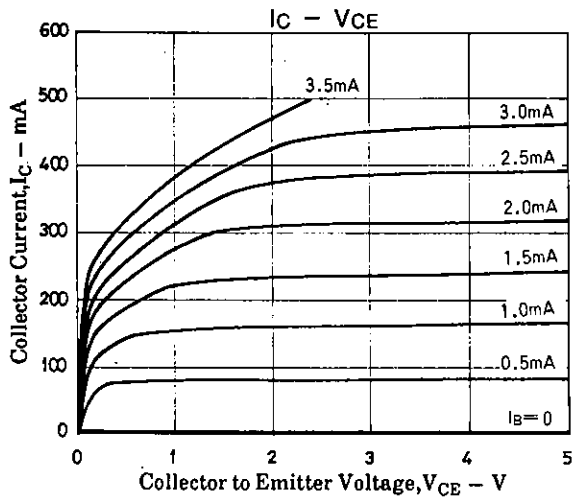


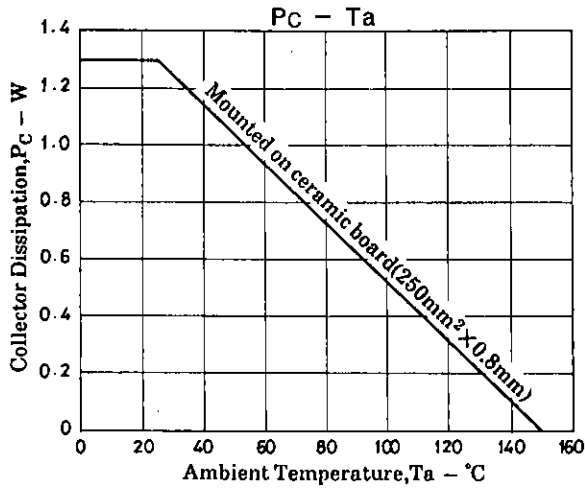
E: Emitter
C: Collector
B: Base

SANYO: PCP

(Bottom View)

2SC4272





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