Ordering number: EN 465G

SANYO

No.465G

2SA984/2SC2274

PNP/NPN Epitaxial Planar Silicon Transistors

AF Power Amp Applications

Features

- High breakdown voltage ($V_{CEO} \geqq 50V$).
- High current ($I_C = 500mA$).
- Low saturation voltage.

( ) : 2SA984

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}	(−)5	V
Collector Current	I_C	(−)500	mA
Collector Current(Pulse)	I_{CP}	(−)800	mA
Collector Dissipation	P_C	600	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

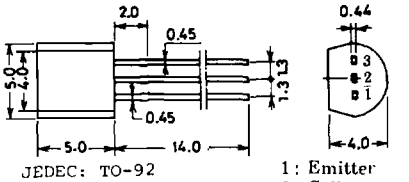
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB}=(−)40V, I_E=0			(−)1.0	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=(−)4V, I_C=0			(−)1.0	μA
DC Current Gain	$h_{FE}(1)$	V_{CE}=(−)5V, I_C=(−)50mA	60※		320※	
	$h_{FE}(2)$	V_{CE}=(−)5V, I_C=(−)400mA, (pulse)	35			
Gain-Bandwidth Product	f_T	V_{CE}=(−)10V, I_C=(−)10mA		120		MHz
Output Capacitance	Cob	V_{CB}=(−)10V, f=1MHz		(9)		pF
				5		pF
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=(−)400mA,		(−0.25)	(−0.6)	V
		I_B=(−)40mA		0.2	0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=(−)400mA, I_B=(−)40mA		(−)0.9	(−)1.2	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	(−)5			V

※ : The 2SA984/2SC2274 are classified by 50mA h_{FE} as follows:

60 D 120	100 E 200	160 F 320

Case Outline 2003B
(unit : mm)



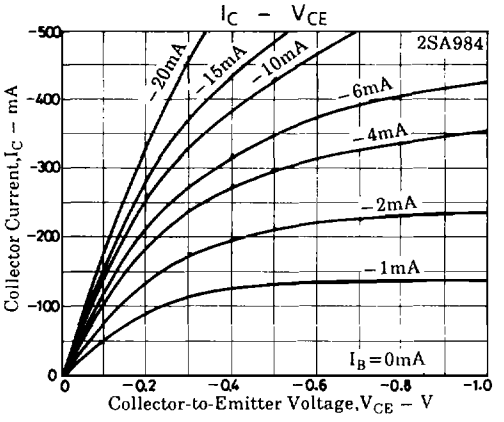
JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

1 : Emitter
2 : Collector
3 : Base

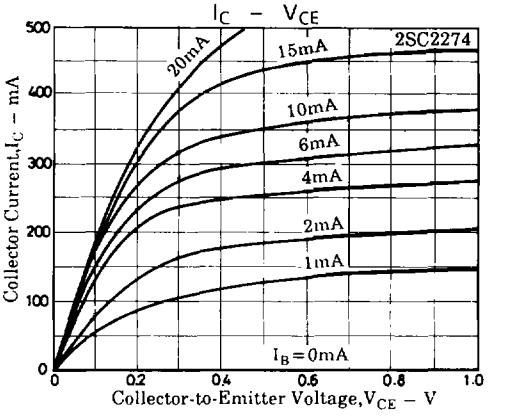
Specifications and information herein are subject to change without notice.

SANYO Electric Co.,Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

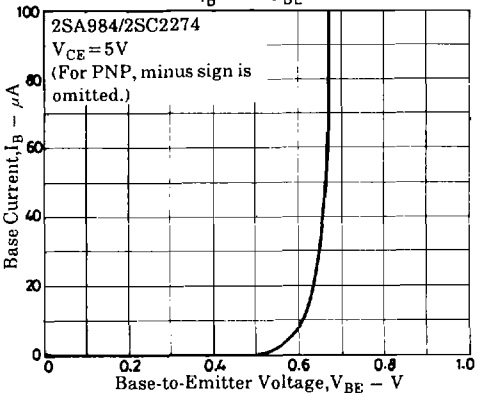
I_C – V_{CE}



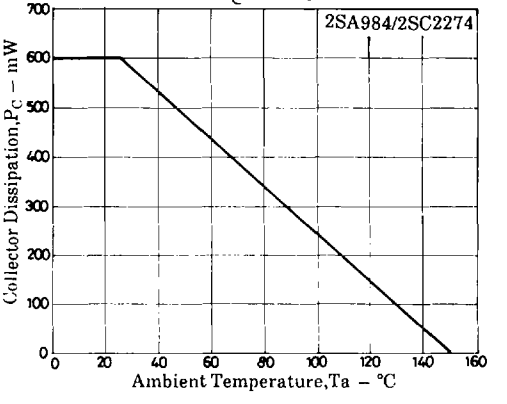
I_C – V_{CE}



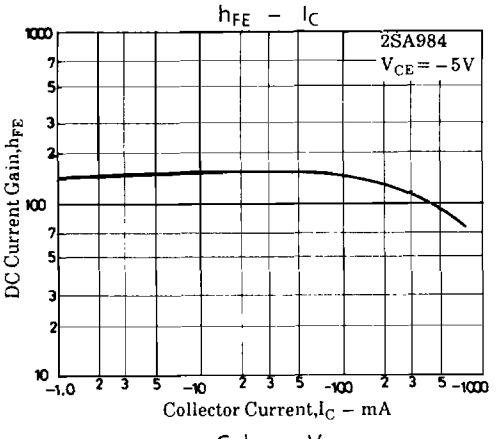
I_B – V_{BE}



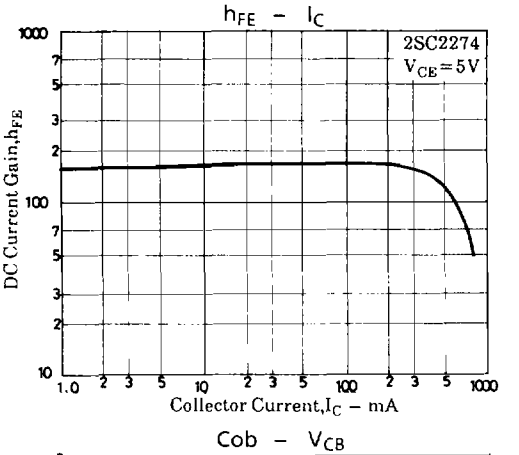
P_C – Ta



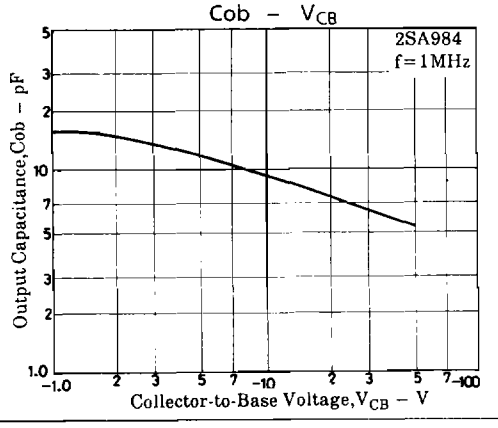
h_{FE} – I_C



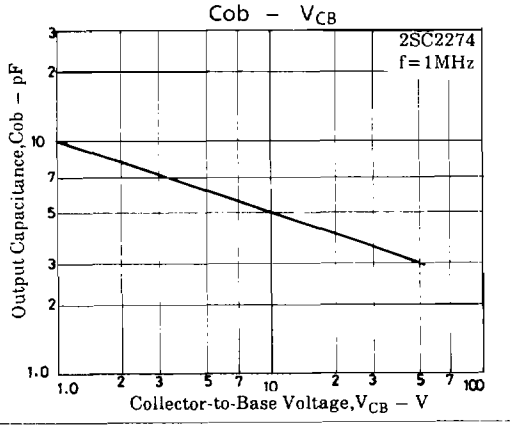
h_{FE} – I_C



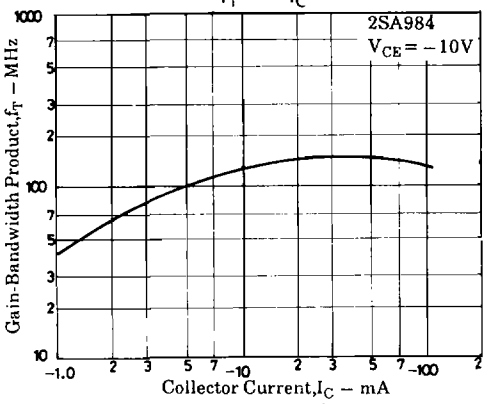
Cob – V_{CB}



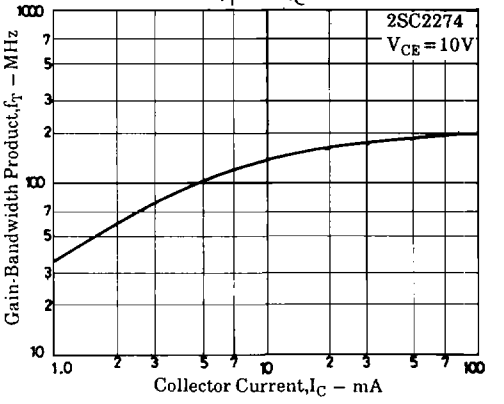
Cob – V_{CB}



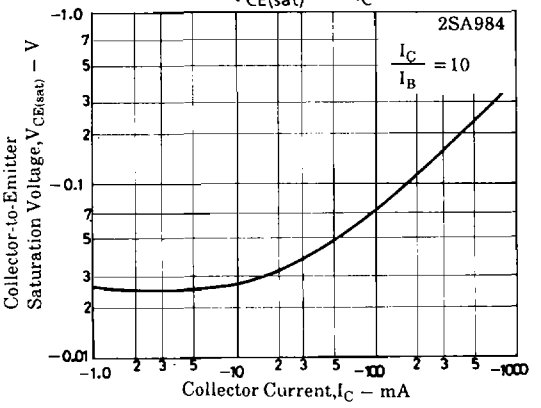
f_T – I_C



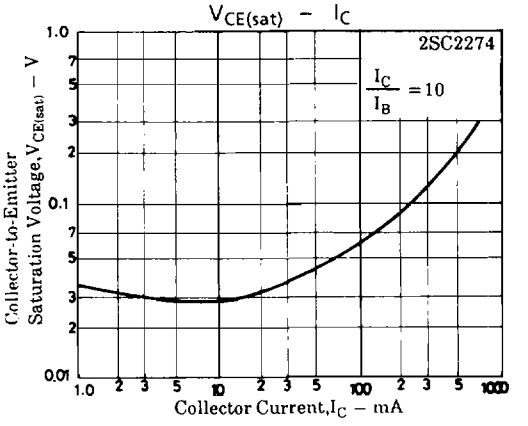
f_T – I_C



$V_{CE(sat)}$ – I_C



$V_{CE(sat)}$ – I_C



ASO