

SANYO	No.2541	2 S C 3 9 2 5
	NPN Epitaxial Planar Type Silicon Transistor DIFFERENTIAL AMP, VERY HIGH-SPEED SWITCHING APPLICATIONS	

Features

- The 2SC3925 is formed with two chips, being equivalent to the 2SC3775, placed in one package.

Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V_{CB0}	20	V
Collector to Emitter Voltage	V_{CE0}	12	V
Emitter to Base Voltage	V_{EB0}	3	V
Collector Current	I_C	100	mA
Base Current	I_B	30	mA
Collector Dissipation	P_C (1 unit)	250	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

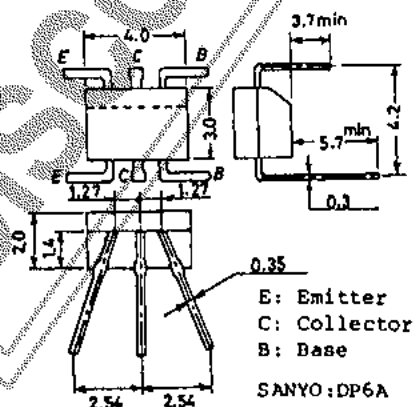
Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CB0}	$V_{CB}=12V, I_E=0$			1.0	uA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=2V, I_C=0$			10	uA
DC Current Gain	h_{FE}	$V_{CE}=10V, I_C=20mA$	40		200	
DC Current Gain Ratio	h_{FE1}/h_{FE2}	$V_{CE}=10V, I_C=20mA$ *1	0.8		1.0	
Base to Emitter Voltage Difference	ΔV_{BE}	$V_{CE}=10V, I_C=20mA$			10	mV
Gain-Bandwidth Product	f_T	$V_{CE}=10V, I_C=20mA$ *2		5.0		GHz
Output Capacitance	c_{ob}	$V_{CB}=10V, f=1MHz$ *2		0.9	1.5	pF

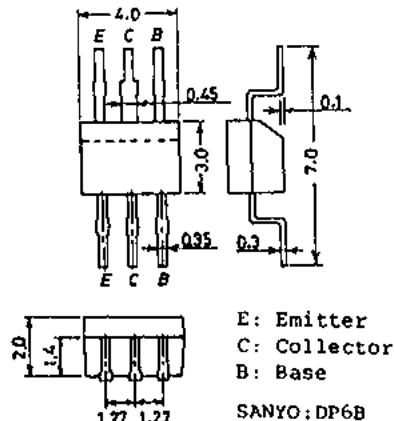
*1: The smaller h_{FE} is taken as h_{FE1} .

*2: Chips in the same lot are evaluated as the 2SC3775.

Case Outline 2029A
(unit:mm)



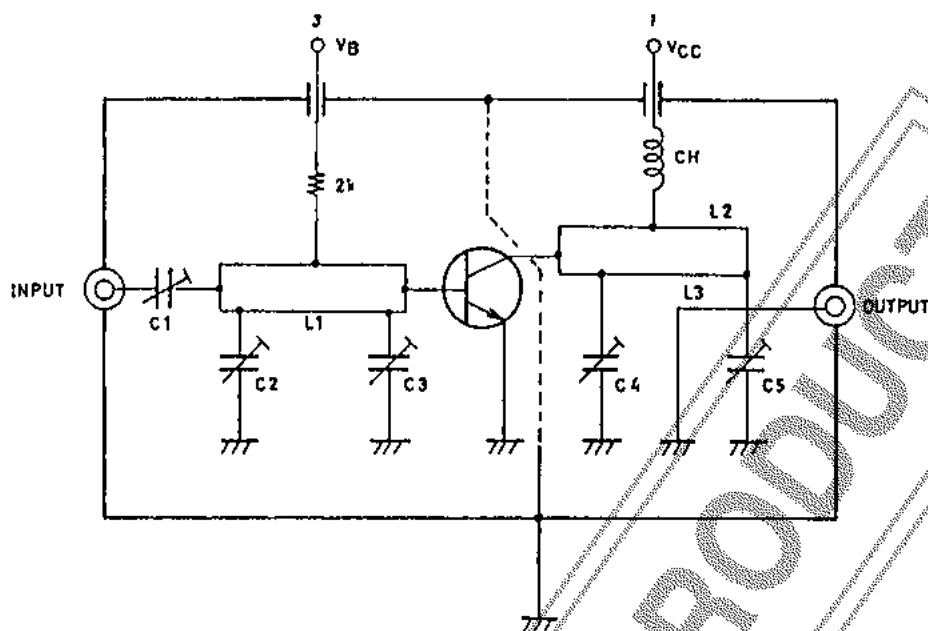
Case Outline 2030A
(unit:mm)



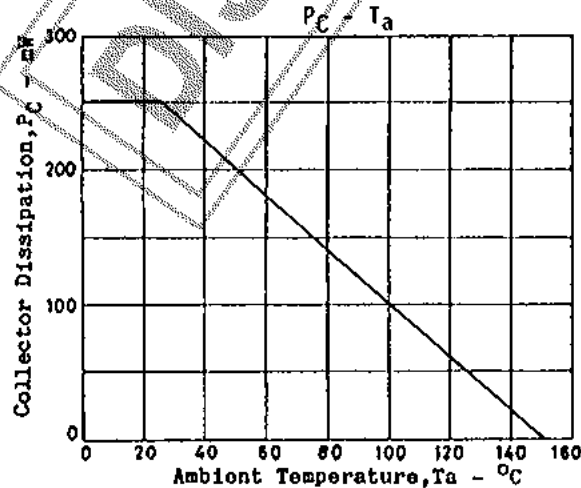
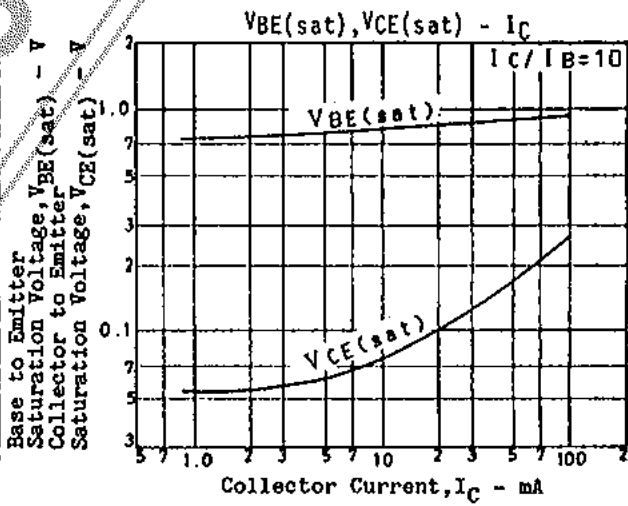
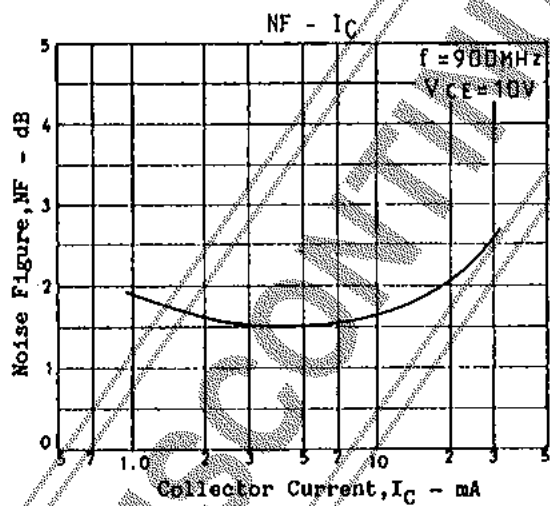
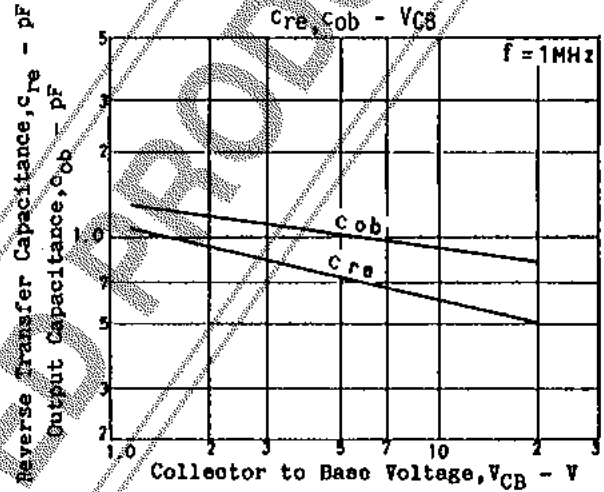
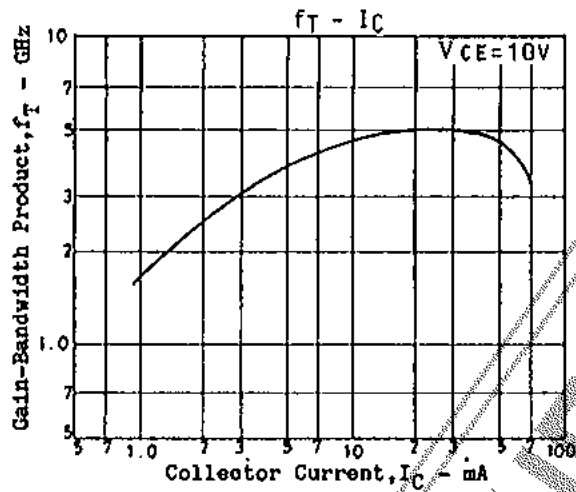
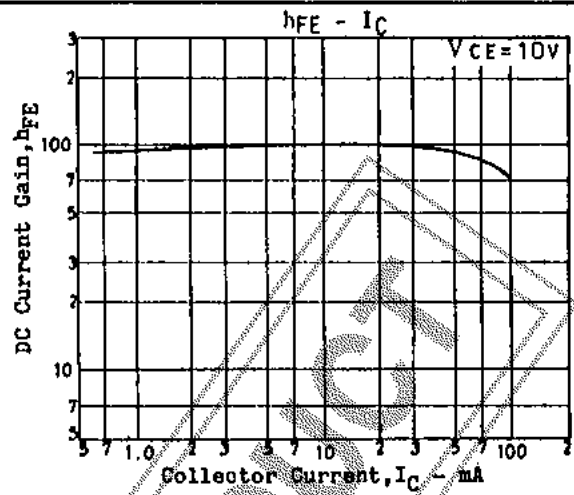
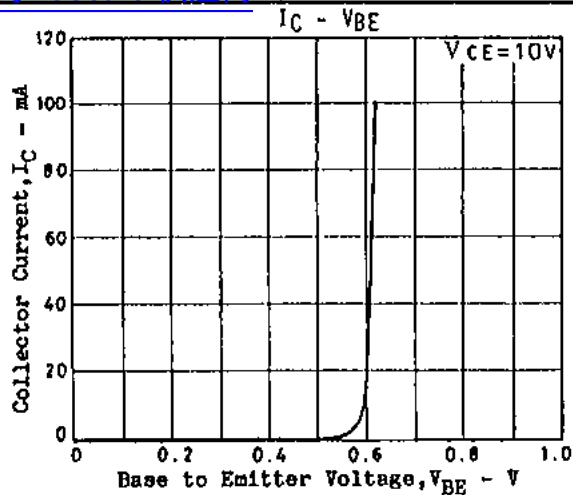
Specifications and information herein are subject to change without notice.

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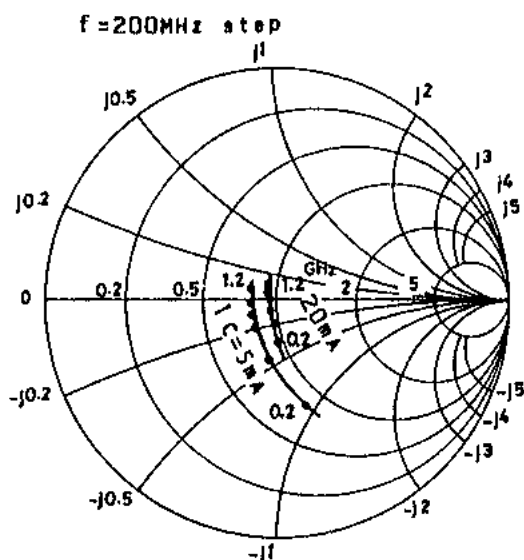
NF Test Circuit



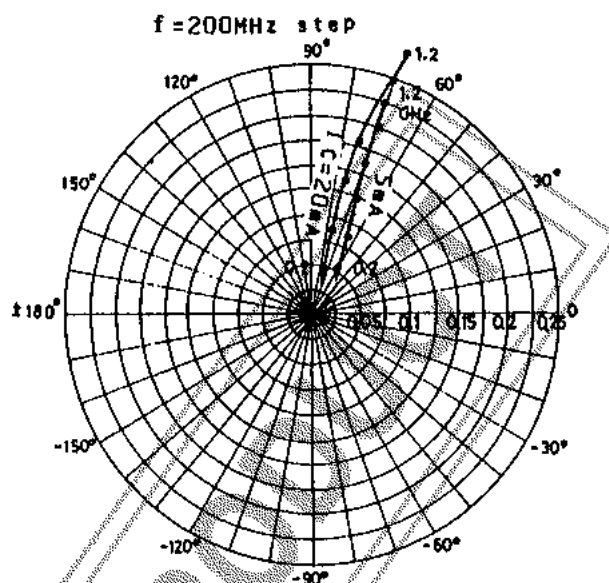
	900MHz
C1	~5 pF
C2	~10 pF
C3	~10 pF
C4	~10 pF
C5	~10 pF
L1	W≠1.5mm, l≠2.5mm Strip line
L2	W≠4mm, l≠2.5mm Strip line
L3	0.6φ, l≠4.0mm
CH	2t+bead core



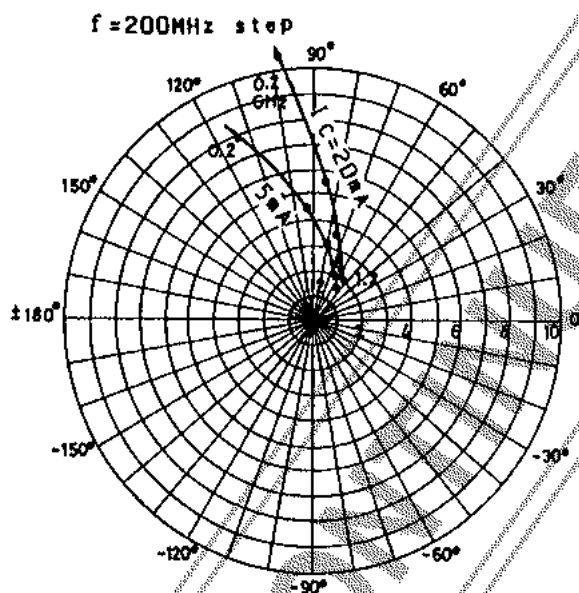
S11e: $V_{CE}=10V$



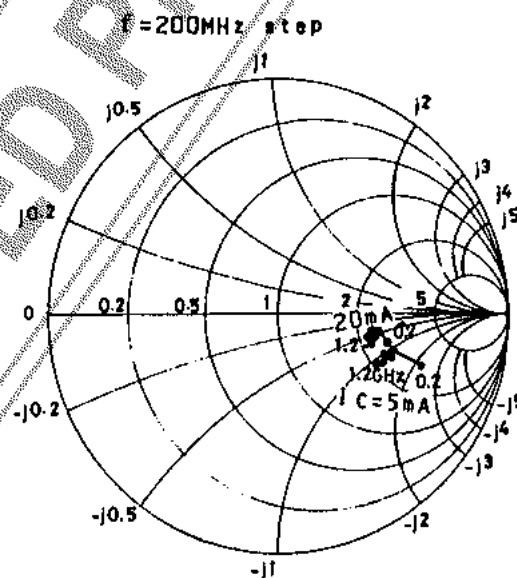
S12e: $V_{CE}=10V$



S21e: $V_{CE}=10V$



S22e: $V_{CE}=10V$



The application circuit diagrams and circuit constants herein are included as an example and provide no guarantee for designing equipment to be mass-produced.
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