

SANYO

No.2531A

2SC4204

NPN Epitaxial Planar Silicon Transistor

High- h_{FE} , AF Amp Applications**Applications**

- AF amp, various drivers

Features

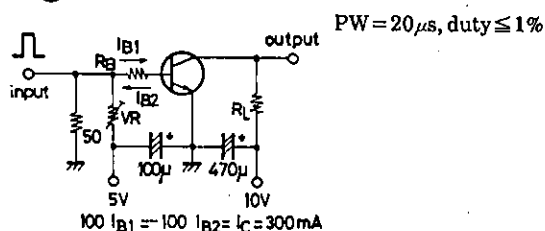
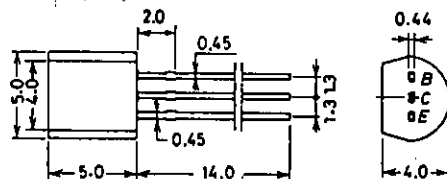
- Adoption of MBIT process
- High DC current gain ($h_{FE}=800$ to 3200)
- Large current capacity ($I_C=0.7A$)
- Low collector to emitter saturation voltage ($V_{CE(sat)} \leq 0.5V$)
- High V_{EBO} ($V_{EBO} \geq 15V$)

Absolute Maximum Ratings at $T_a=25^\circ C$

		unit
Collector to Base Voltage	V_{CBO}	30 V
Collector to Emitter Voltage	V_{CEO}	25 V
Emitter to Base Voltage	V_{EBO}	15 V
Collector Current	I_C	0.7 A
Collector Current(Pulse)	I_{CP}	1.5 A
Collector Dissipation	P_C	0.6 W
Junction Temperature	T_J	150 $^\circ C$
Storage Temperature	T_{stg}	-55 to +150 $^\circ C$

Electrical Characteristics at $T_a=25^\circ C$

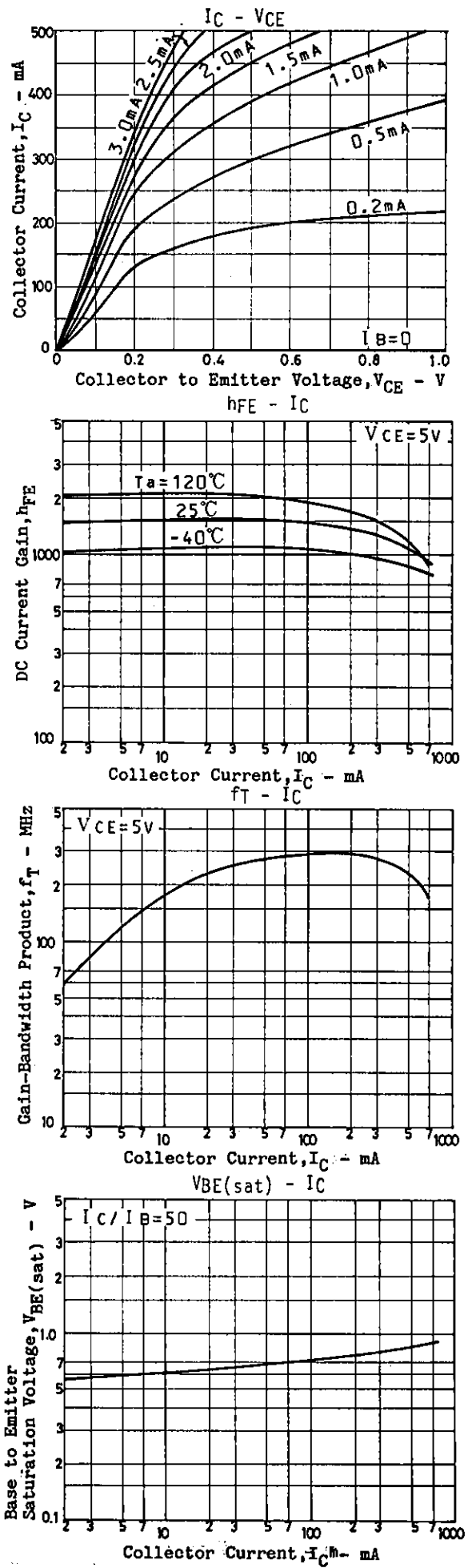
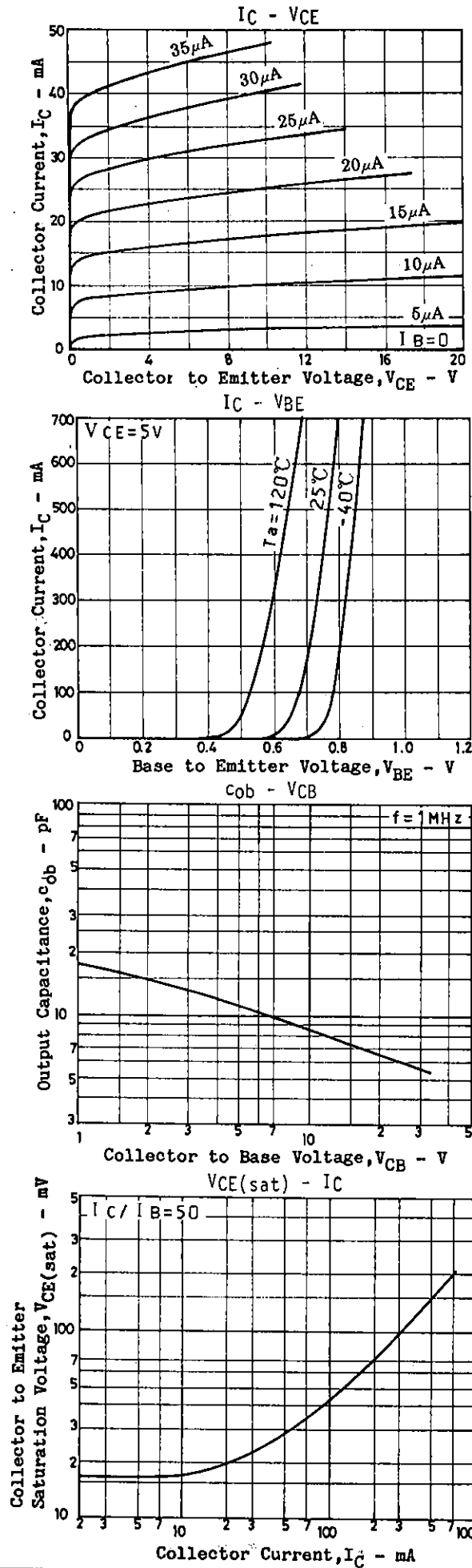
		min	typ	max	unit
Collector Cutoff Current	I_{CBO} $V_{CB}=20V, I_E=0$			0.1	μA
Emitter Cutoff Current	I_{EBO} $V_{EB}=10V, I_C=0$			0.1	μA
DC Current Gain	h_{FE1} $V_{CE}=5V, I_C=50mA$	800	1500	3200	
	h_{FE2} $V_{CE}=5V, I_C=500mA$	600			
Gain-Bandwidth Product	f_T $V_{CE}=10V, I_C=50mA$		270		MHz
Output Capacitance	c_{ob} $V_{CB}=10V, f=1MHz$		9		pF
C-E Saturation Voltage	$V_{CE(sat)}$ $I_C=500mA, I_B=10mA$	0.15	0.50		V
B-E Saturation Voltage	$V_{BE(sat)}$ $I_C=500mA, I_B=10mA$	0.9	1.2		V
C-B Breakdown Voltage	$V_{(BR)CBO}$ $I_C=10\mu A, I_E=0$	30			V
C-E Breakdown Voltage	$V_{(BR)CEO}$ $I_C=1mA, R_{BE}=\infty$	25			V
E-B Breakdown Voltage	$V_{(BR)EBO}$ $I_E=10\mu A, I_C=0$	15			V
Turn-on Time	t_{on} See specified Test Circuit.		0.1		μs
Storage Time	t_{stg} "		0.6		μs
Fall Time	t_f "		0.06		μs

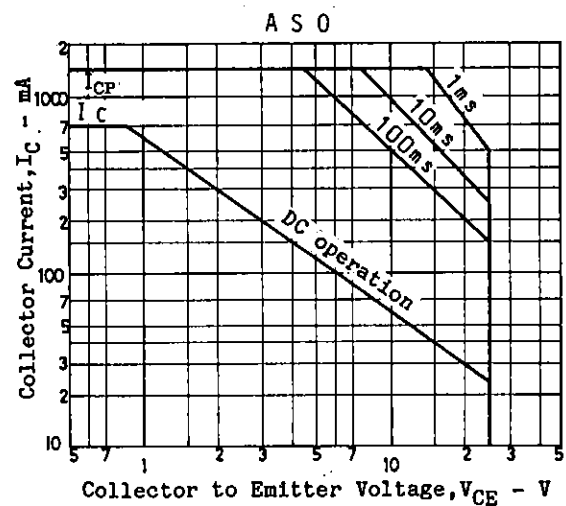
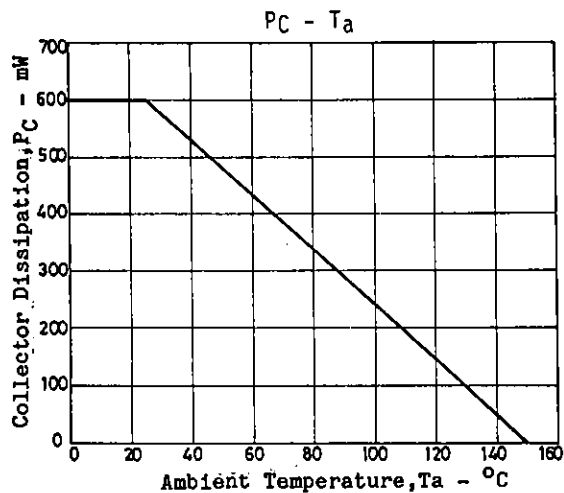
Switching Time Test Circuit**Package Dimensions 2003A (unit: mm)**

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

B. Base
C. Collector
E. Emitter

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