

**SANYO**

No.1856A

**2SA1435**

PNP Epitaxial Planar Silicon Transistor

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

**Applications**

- . Low frequency general-purpose amplifiers, drivers, muting circuits

**Features**

- . Adoption of MBIT process
- . High DC current gain ( $h_{FE}=500$  to 1200)
- . Large current capacity
- . Low collector-to-emitter saturation voltage ( $V_{CE(sat)} \leq 0.5V$  max)
- . High  $V_{EBO}$  ( $V_{EBO} \geq 15V$ )

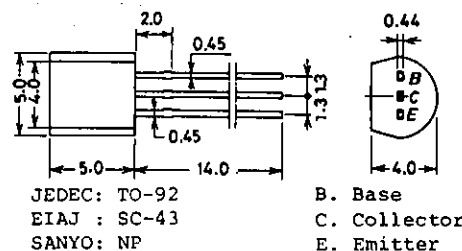
**Absolute Maximum Ratings at  $T_a=25^\circ C$**

			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	$I_C$	-300	mA
Collector Current(Pulse)	$I_{CP}$	-500	mA
Collector Dissipation	$P_C$	600	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to 150	$^\circ C$

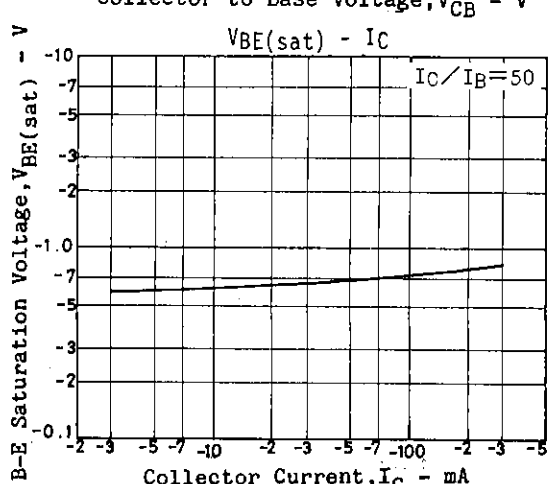
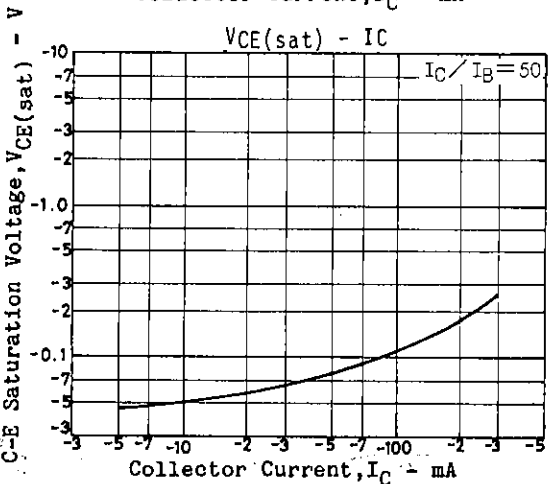
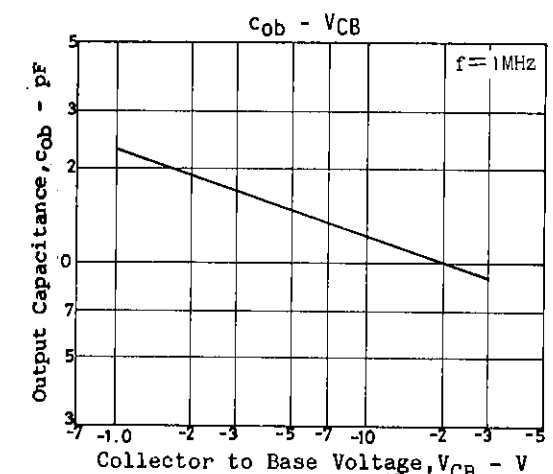
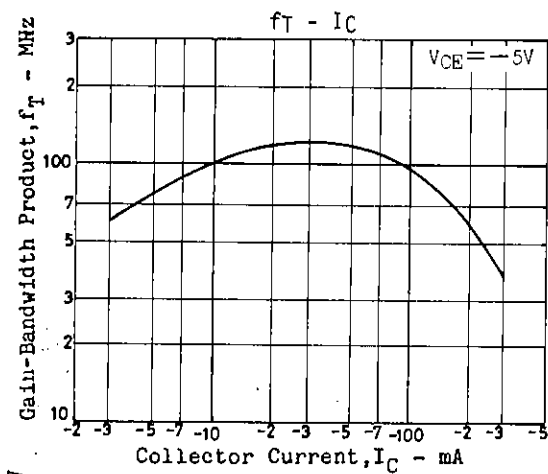
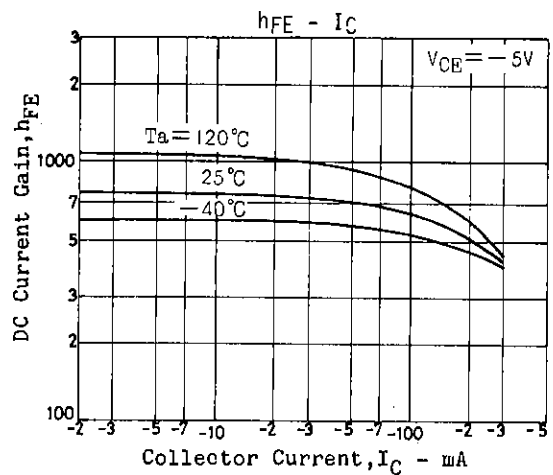
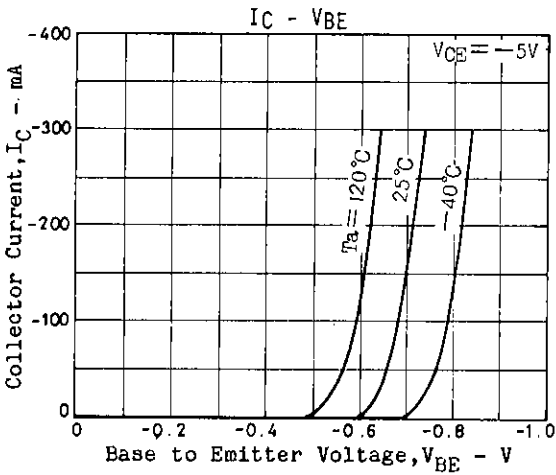
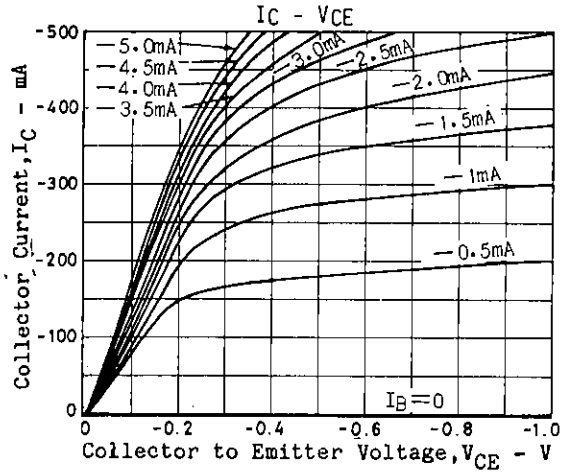
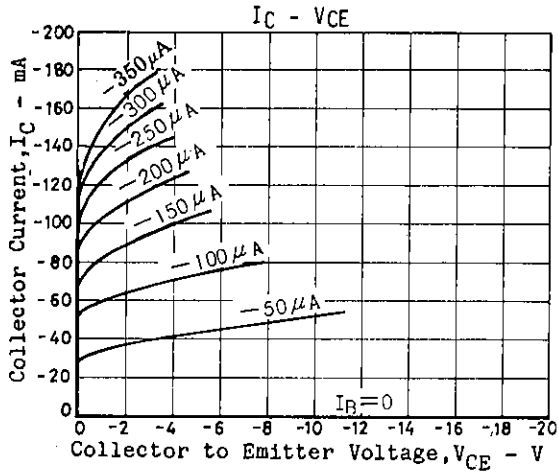
**Electrical Characteristics at  $T_a=25^\circ C$**

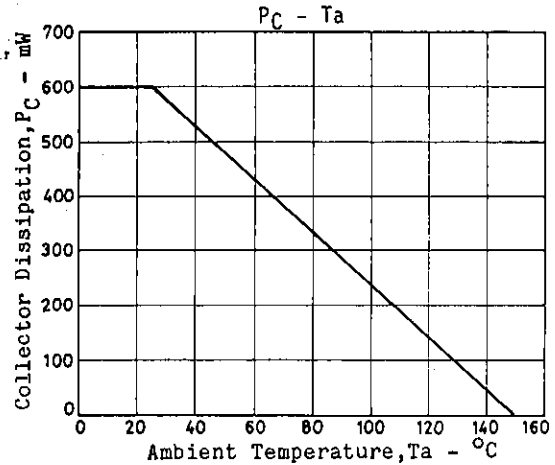
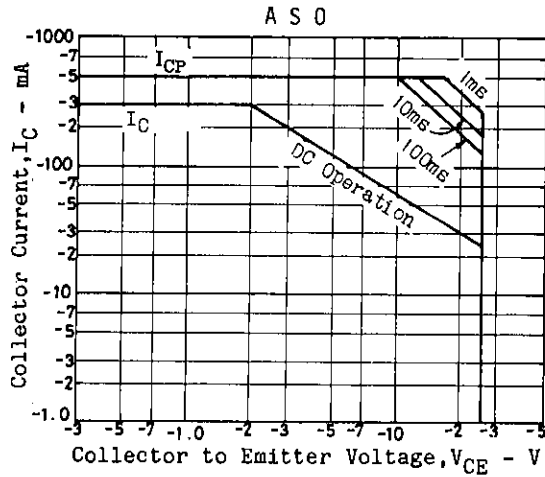
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=-20V, I_E=0$			-0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=-10V, I_C=0$			-0.1	$\mu A$
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-5V, I_C=-10mA$	500	800	1200	
	$h_{FE(2)}$	$V_{CE}=-5V, I_C=-200mA$	200			
Gain-Bandwidth Product	$f_T$	$V_{CE}=-10V, I_C=-10mA$		100		MHz
Output Capacitance	$c_{ob}$	$V_{CB}=-10V, f=1MHz$		12		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-200mA, I_B=-4mA$	-0.18	-0.5		V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-200mA, I_B=-4mA$	-0.77	-1.1		V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-30			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1mA, R_{BE}=\infty$	-25			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-15			V

**Package Dimensions 2003A**  
(unit: mm)



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





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