

SANYO

No.2524A

2SA1437

PNP Epitaxial Planar Silicon Transistor

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

- . AF amp, various drivers, muting circuit

Features

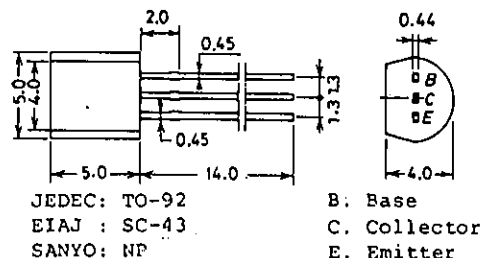
- . Very small-sized package permitting sets to be made smaller and slimmer.
- . Adoption of FBET process
- . High DC current gain ($h_{FE}=400$ to 1000)
- . High breakdown voltage ($V_{CEO} \geq 100V$)
- . Low collector to emitter saturation voltage ($V_{CE(sat)} \leq 0.5V$)
- . High V_{EBO} ($V_{EBO} \geq 15V$)
- . Small c_{ob} ($c_{ob}=4.0pF$ typ)

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

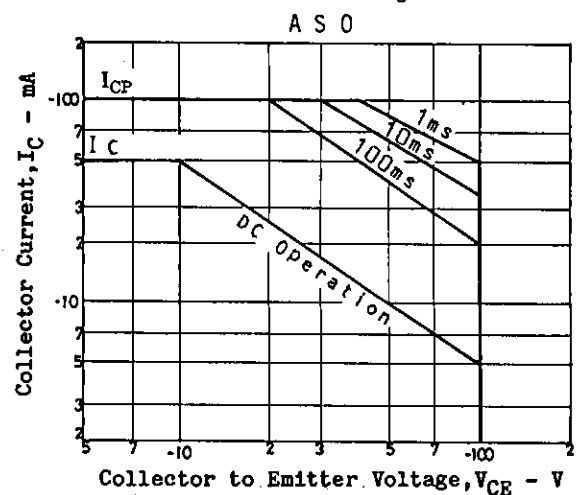
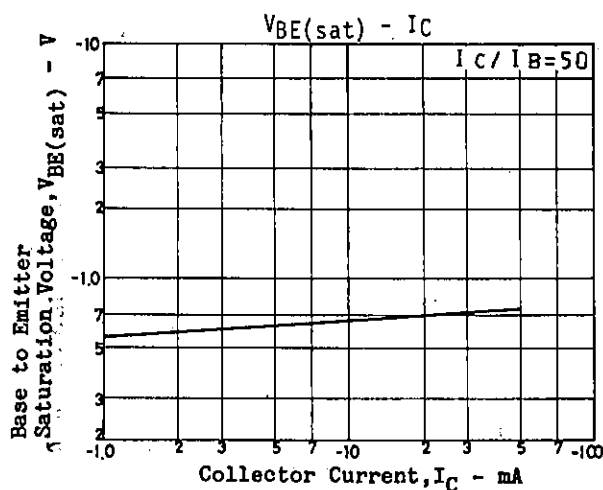
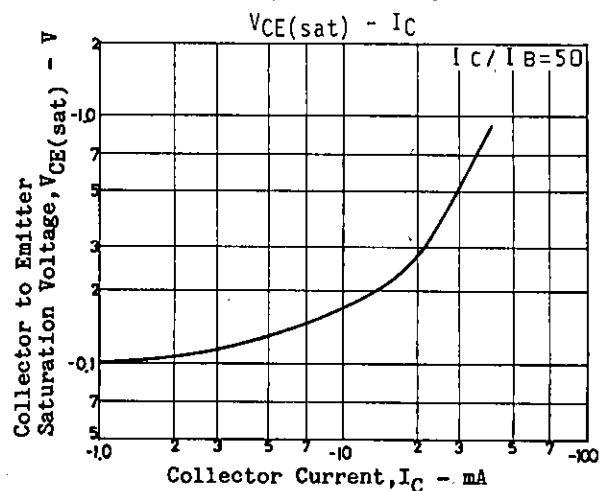
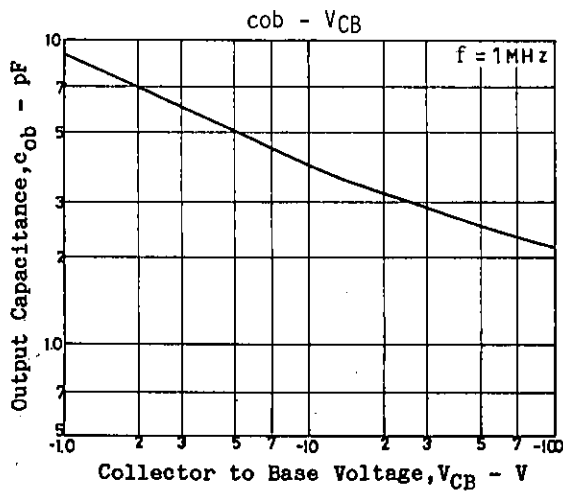
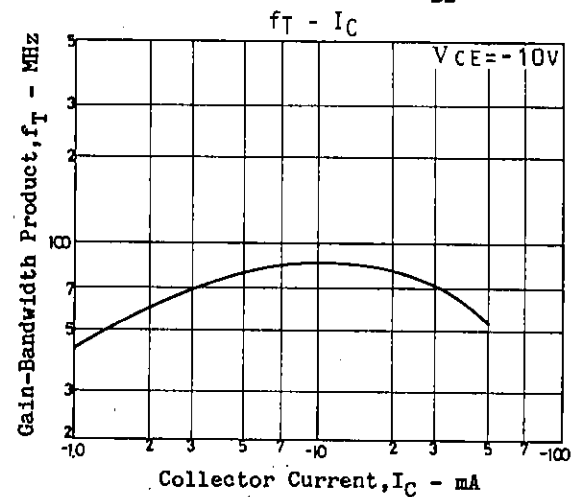
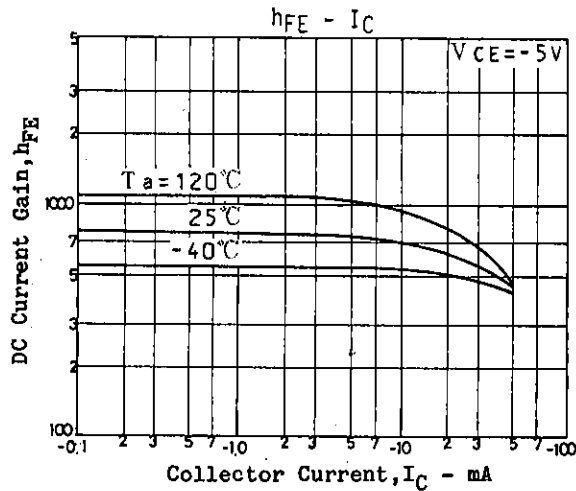
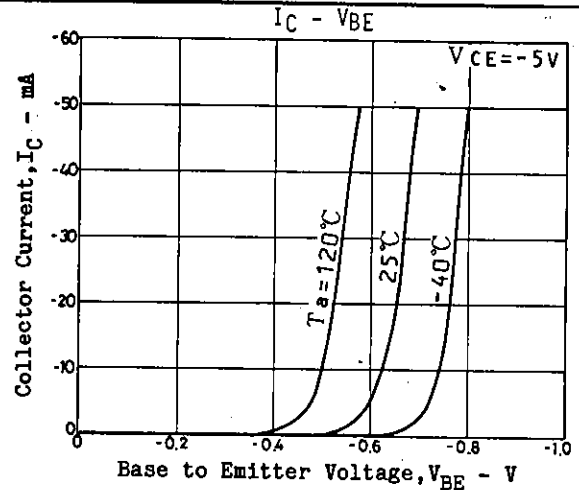
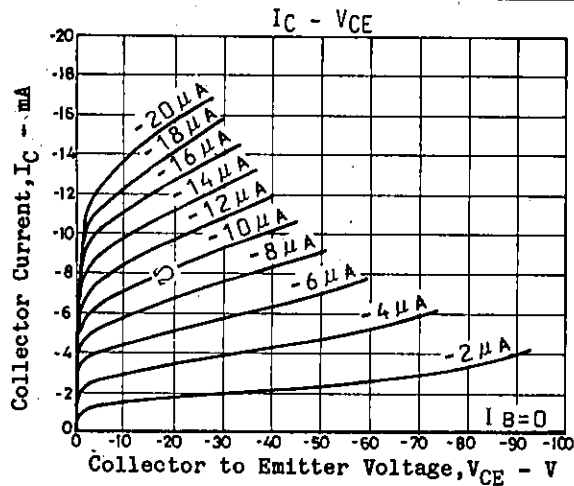
			unit
Collector to Base Voltage	V_{CB0}	-120	V
Collector to Emitter Voltage	V_{CEO}	-100	V
Emitter to Base Voltage	V_{EBO}	-15	V
Collector Current	I_C	-50	mA
Collector Current(Pulse)	I_{CP}	-100	mA
Collector Dissipation	P_C	500	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

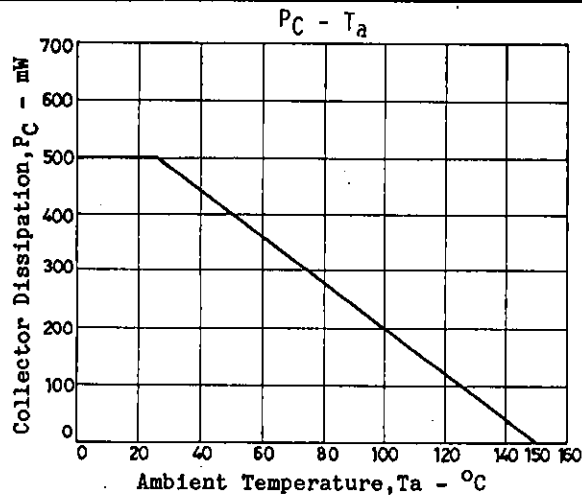
Electrical Characteristics at $T_a=25^\circ C$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=-80V, I_E=0$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-10V, I_C=0$			-0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=-5V, I_C=-10mA$	400	700	1000	
Gain-Bandwidth Product	f_T	$V_{CE}=-10V, I_C=-10mA$		85		MHz
Output Capacitance	c_{ob}	$V_{CB}=-10V, f=1MHz$		4.0		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=-10mA, I_B=-0.2mA$	-0.18	-0.5		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=-10mA, I_B=-0.2mA$	-0.7	-1.0		V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-120			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1mA, R_{BE}=\infty$	-100			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-15			V

Package Dimensions 2003A
(unit: mm)

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