

SANYO

No. 397E

2SB514/2SD330

PNP/NPN Triple Diffused Planar Silicon Transistors

50V/2A Low-Frequency Power Amp
Applications**Features**

- Especially suited for use in output stage of 10W AF Power amp
- Complementary pair with the 2SB514 and 2SD313

(): 2SB514

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

			unit
Collector-to-Base Voltage	V_{CB0}	(-)50	V
Collector-to-Emitter Voltage	V_{CEO}	(-)50	V
Emitter-to-Base Voltage	V_{EBO}	(-)5	V
Collector Current	I_C	(-)2	A
Peak Collector Current	i_{cp}	(-)5	A
Collector Dissipation	P_C	1.75	W
		20	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

 $T_c = 25^\circ\text{C}$ **Electrical Characteristics at $T_a = 25^\circ\text{C}$**

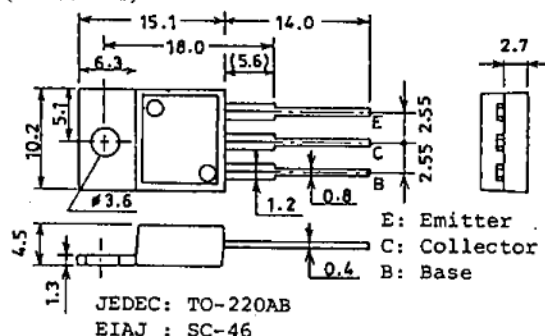
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)20\text{V}, I_E = 0$			(-)0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4\text{V}, I_C = 0$			(-)1.0	mA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = (-)2\text{V}, I_C = (-)1\text{A}$	40*		320*	
	$h_{FE}(2)$	$V_{CE} = (-)2\text{V}, I_C = (-)0.1\text{A}$	35			
Gain-Bandwidth Product	f_T	$V_{CE} = (-)5\text{V}, I_C = (-)0.5\text{A}$		8		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)2\text{A}, I_B = (-)0.2\text{A}$		(-)1.0		V
Base to Emitter Voltage	V_{BE}	$I_C = (-)1\text{A}, V_{CE} = (-)5\text{V}$		(-)1.5		V

* The 2SB514/2SD330 are classified by 1A h_{FE} as follows

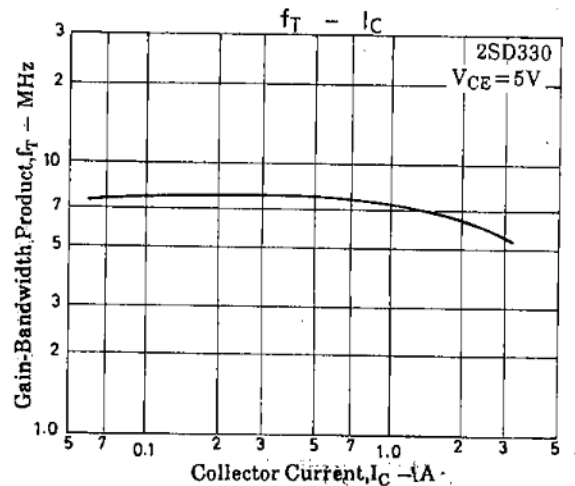
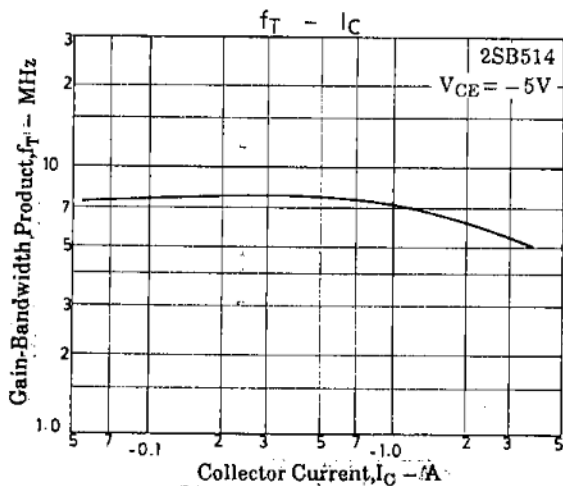
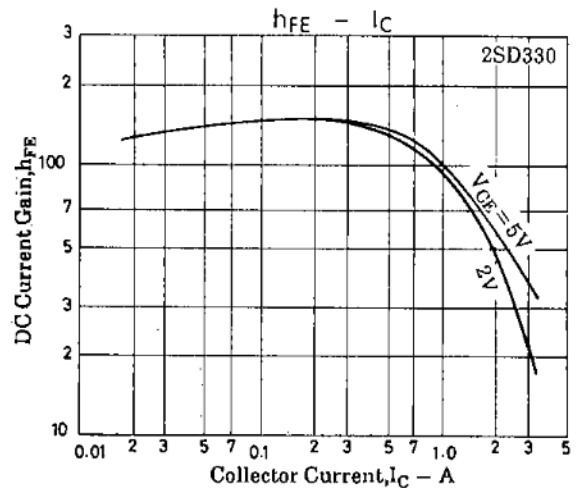
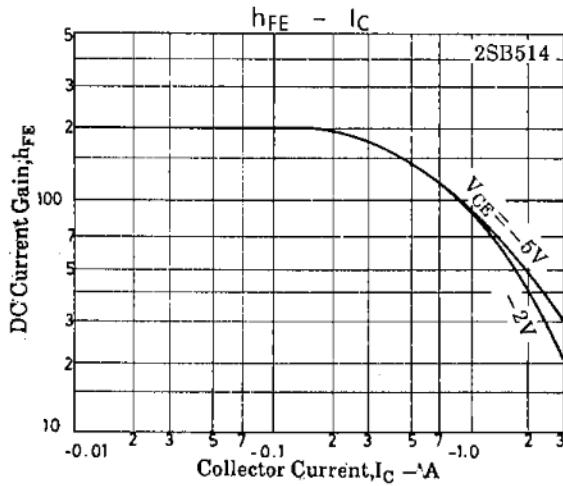
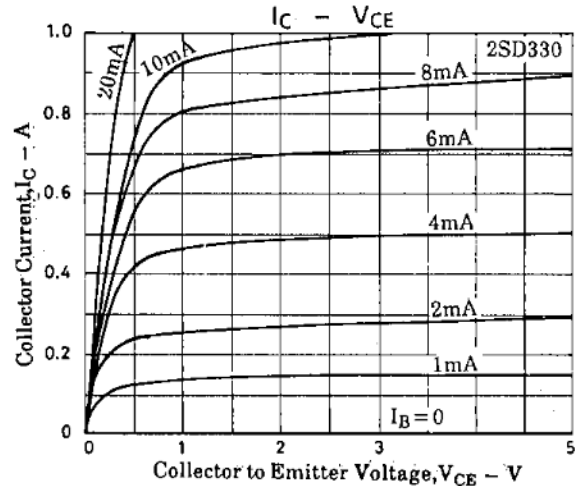
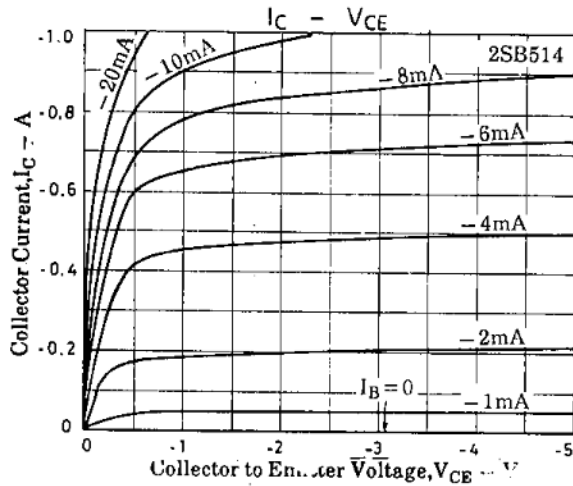
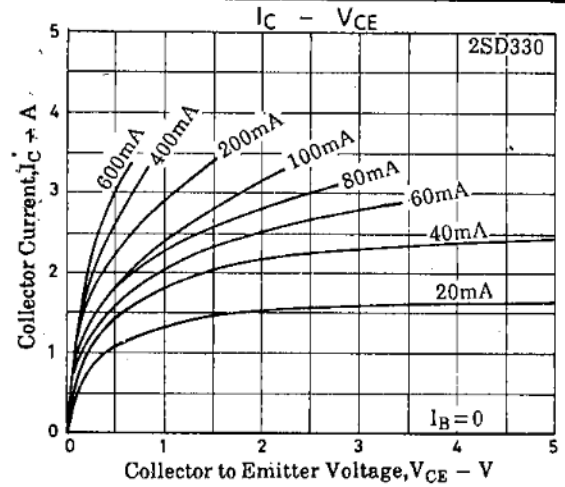
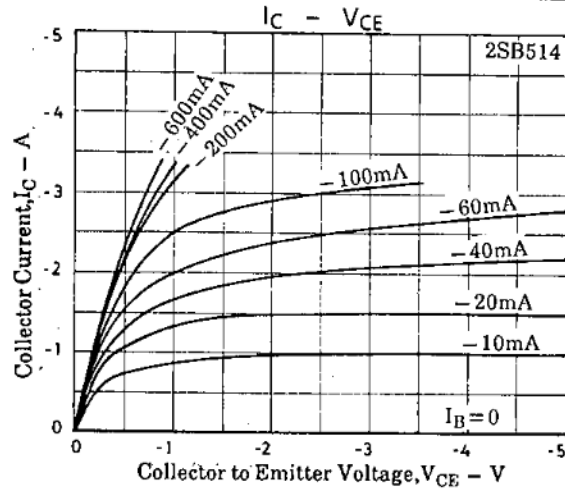
40	C	80	60	D	120	100	E	200	160	F	320
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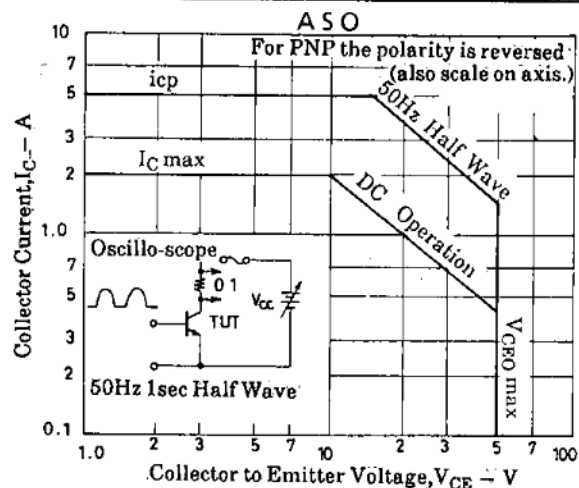
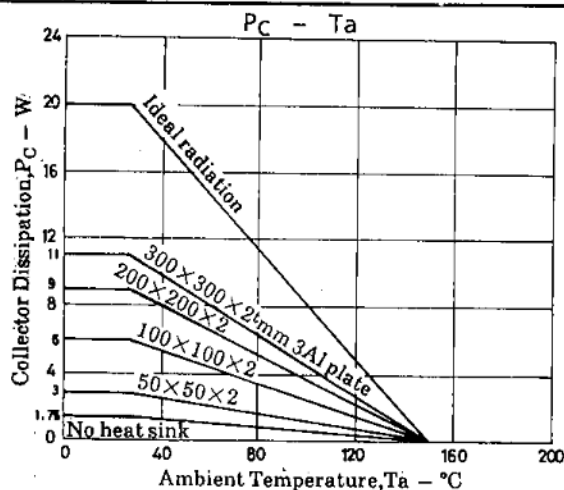
Package Dimensions 2010B

(unit: mm)



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