

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 Ta = 25°C

Collector-to-Base Voltage	V_{CBO}		(-)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
		$T_c = 25^\circ C$	20	W
Junction Temperature	T_j		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

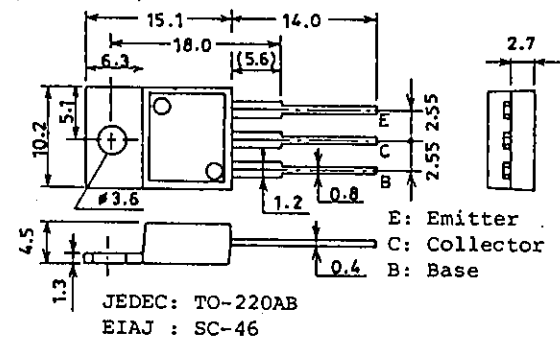
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)20V, I_E = 0$			(-)0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4V, I_C = 0$			(-)1.0	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = (-)2V, I_C = (-)1A$	40*		320*	
	$h_{FE(2)}$	$V_{CE} = (-)2V, I_C = (-)0.1A$	35			
Gain-Bandwidth Product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

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

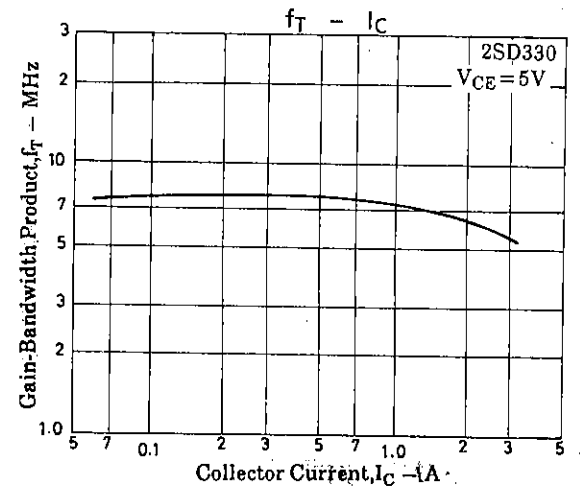
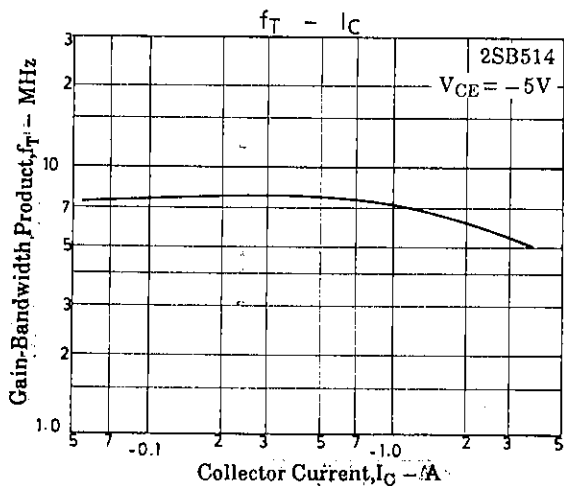
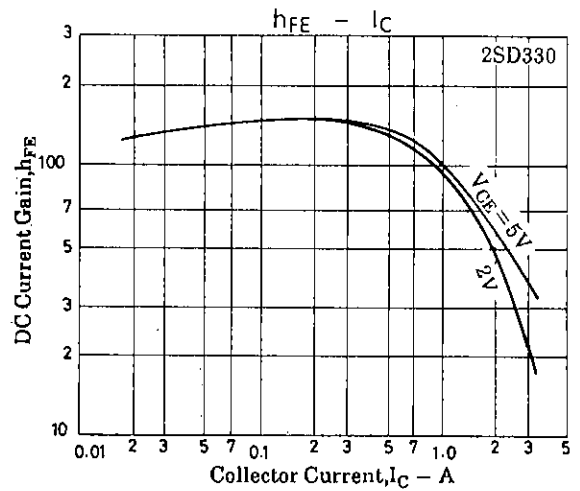
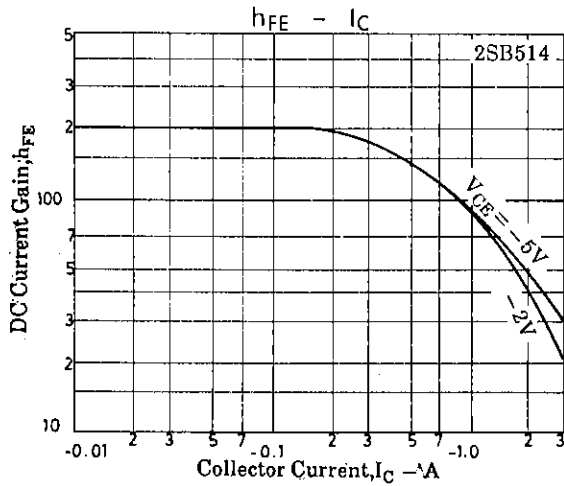
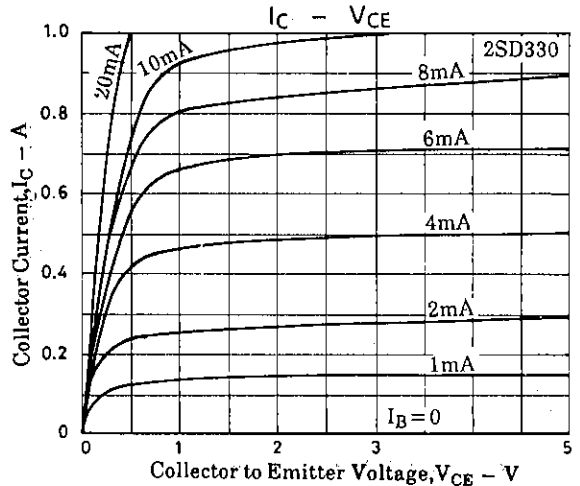
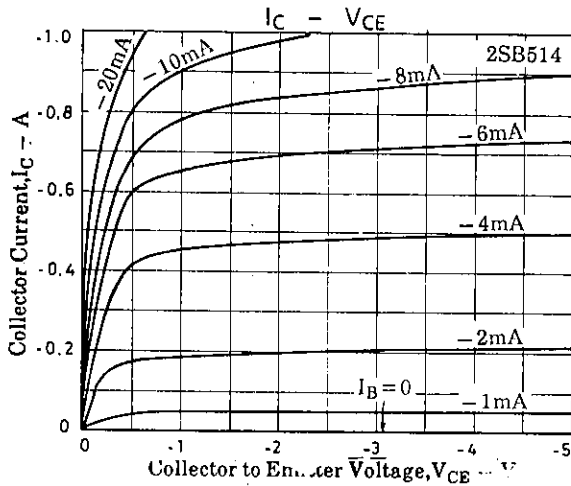
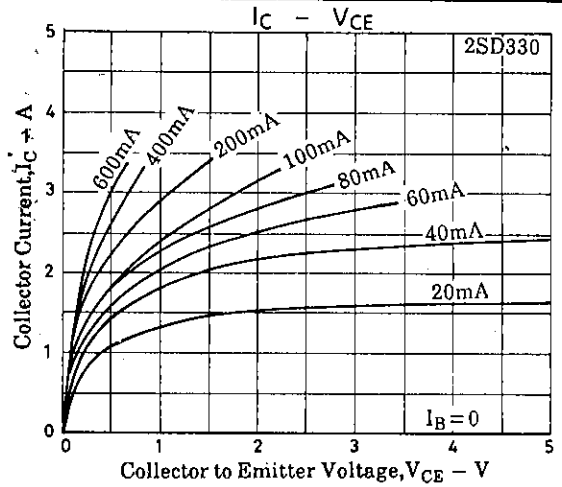
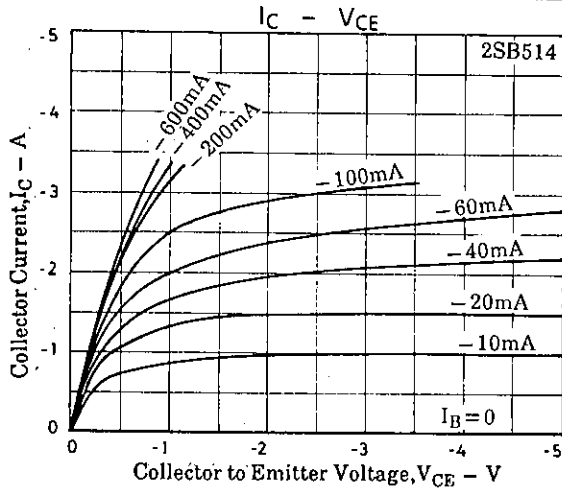
40	C	80	60	D	120	100	E	200	160	F	320
----	---	----	----	---	-----	-----	---	-----	-----	---	-----

Package Dimensions 2010B

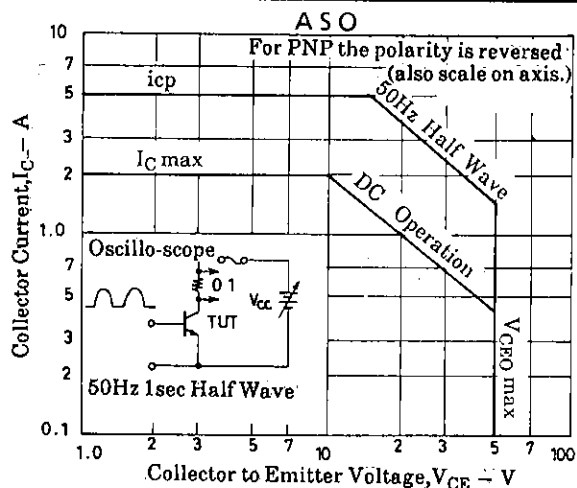
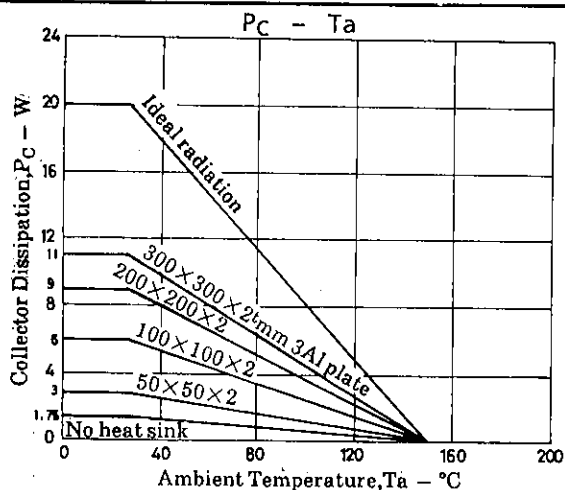
(unit : mm)



2SB514/2SD330



2SB514/2SD330



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use.
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.