



TEN FOUR LTD.  
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# SANYO SEMICONDUCTOR

2SB507,508  
2SD313,314

2SB507,508 — Planar Type Silicon Transistor  
2SD313,314 — For AF Power Amplifier Use

- .2SB507,2SB508 and 2SD313,2SD314 are complementary pairs respectively.
- .These are designed for the output stage of 15W to 25W AF power amplifier.
- .2SB507 and 2SB508, or 2SD313 and 2SD314, differ from their care outlines only.
- ( ) shows the case of 2SB507, 2SB508 only.

### Absolute Maximum Ratings at Ta=25°C

Collector to Base Voltage	VCBO	(-)60	V
Collector to Emitter Voltage	VCEO	(-)60	V
Emitter to Base Voltage	VEBO	(-)5	V
Collector Current	IC	(-)3	A
	icp	(-)8	A
Collector Dissipation	PC	1.75	W
		(TC=25°C)	30
			W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-40 to +150	°C

### Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cut Off Current	ICBO	VCB=(-)20V, IE=0			(-)0.1	mA
	ICEO	VCE=(-)60V, RBE=∞			(-)5	mA
Emitter Cut Off Current	IEBO	VEB=(-)4V, IC=0			(-)1	mA
Secondary Breakdown Voltage	VS/B	IC=(-)0.5A, t=1sec	(-)60			V
DC Current Gain	*hFE(1)	VCE=(-)2V, IC=(-)1A	40*		320*	
	hFE(2)	VCE=(-)2V, IC=(-)0.1A	40			
Gain Band Width Product	fT	VCE=(-)5V, IC=(-)0.5A		8		MHz
Output Capacitance	cob	(VCB=(-)10V, f=1MHz)		(130)		pF
				65		pF
C-E Saturation Voltage	VCE(sat)	IC=(-)2A, IB=(-)0.2A	(-)0.4	(-)1.0		V
Base to Emitter Voltage	VBE	IC=(-)1A, VCE=(-)2V		(-)1.5		V

\*hFE(1) is classified by 2V 1A hFE as follows:

40	C	80	60	D	120	100	E	200	160	F	320
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### Case Outline (unit:mm)

