



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
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)

