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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	V_{CBO}		(-)60	V
Collector to Emitter Voltage	V_{CEO}		(-)60	V
Emitter to Base Voltage	V_{EBO}		(-)5	V
Collector Current	I_C		(-)3	A
	i_{cp}		(-)8	A
Collector Dissipation	P_C		1.75	W
		(T_C=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	I_{CBO}	V_{CB}=(-)20V, I_E=0				(-)0.1	mA
	I_{CEO}	V_{CE}=(-)60V, R_{BE}=∞				(-)5	mA
Emitter Cut Off Current	I_{EBO}	V_{EB}=(-)4V, I_C=0				(-)1	mA
Secondary Breakdown Voltage	$V_{S/B}$	I_C=(-)0.5A, t=1sec		(-)60			V
DC Current Gain	*h_{FE}(1)	V_{CE}=(-)2V, I_C=(-)1A		40*		320*	
	h_{FE}(2)	V_{CE}=(-)2V, I_C=(-)0.1A		40			
Gain Band Width Product	f_T	V_{CE}=(-)5V, I_C=(-)0.5A			8		MHz
Output Capacitance	C_{ob}	(V_{CB}=(-)10V, f=1MHz)	2SB507,508		(130)		pF
			2SD313,314		65		pF
C-E Saturation Voltage	V_{CE}(sat)	I_C=(-)2A, I_B=(-)0.2A				(-)0.4(-)1.0	V
Base to Emitter Voltage	V_{BE}	I_C=(-)1A, V_{CE}=(-)2V				(-)1.5	V

*h_{FE}(1) is classified by 2V 1A h_{FE} as follows:

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

Case Outline (unit:mm)

