

**FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON PNP EPITAXIAL PLANAR TYPE**

DESCRIPTION

Mitsubishi 2SB1314 is a silicon PNP epitaxial planar type power transistor using insulated full mold package.

FEATURE

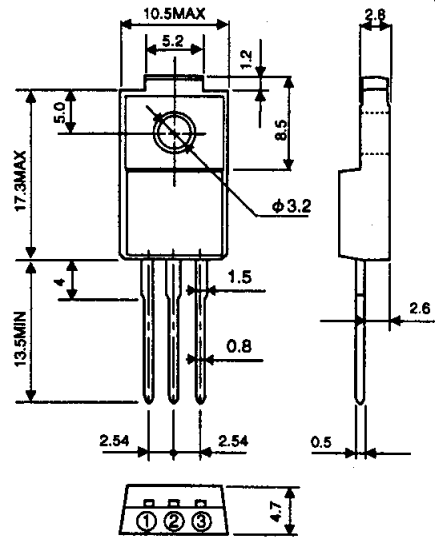
- High collector current $I_C = -3A, I_{CM} = -5A$
- High h_{FE} $h_{FE} = 150$ to 500
- Full mold package with heat sink
- High voltage $V_{CEO} = -60V$
- Low collector to emitter saturation voltage
 $V_{CE(sat)} = -0.5V$ max (@ $I_C = -2A, I_B = -0.2A$)

APPLICATION

Power supply circuit, solenoid drive.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

- ① : BASE
 - ② : COLLECTOR
 - ③ : EMITTER
- EIAJ : —
JEDEC : —

Note)
The dimension without tolerance represent central value.

MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V _{CB0}	Collector to Base voltage	-60	V
V _{EB0}	Emitter to Base voltage	-7	V
V _{CE0}	Collector to Emitter voltage	-60	V
I _{CM}	Peak collector current	-5	A
I _C	Collector current	-3	A
P _C	Collector dissipation	(Ta=25°C)	2
		(Tc=25°C)	15
T _J	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

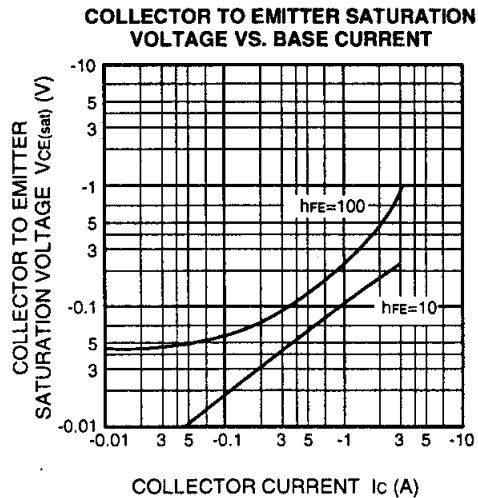
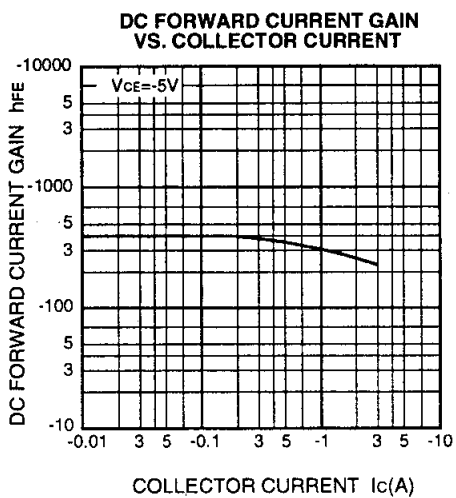
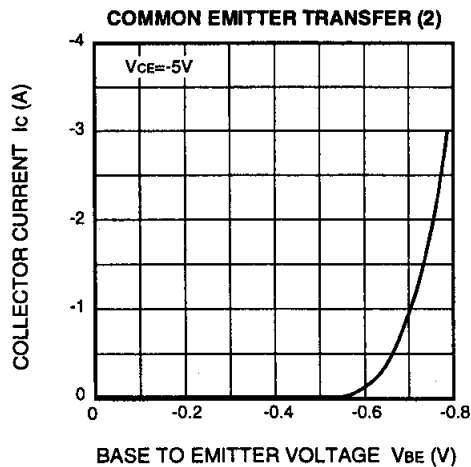
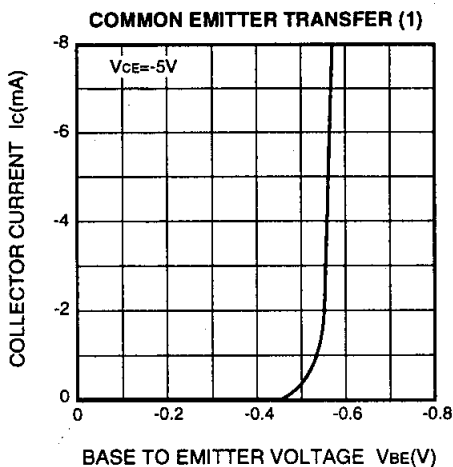
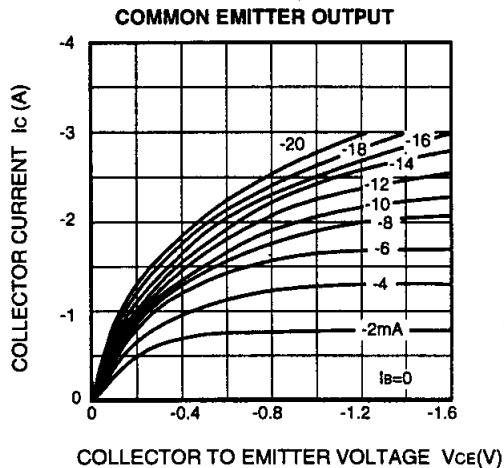
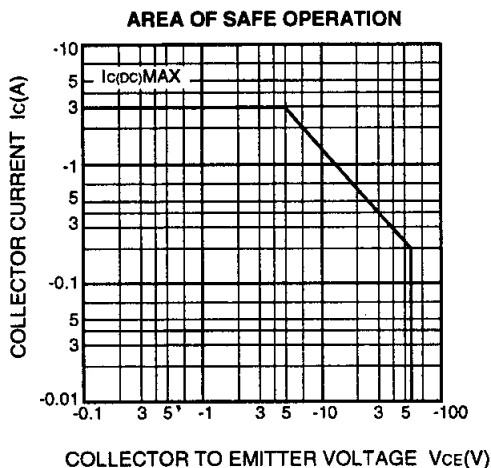
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V _{(BR)CBO}	C to B break down voltage	I _C = -100 μA	-60			V
V _{(BR)EBO}	E to B break down voltage	I _E = -100 μA, I _C = 0	-7			V
V _{(BR)CEO}	C to E break down voltage	I _C = -1mA, R _{BE} = ∞	-60			V
I _{CB0}	Collector cut off current	V _{CB} = -50V, I _E = 0			-1	μA
I _{EB0}	Emitter cut off current	V _{EB} = -6V, I _C = 0			-1	μA
h _{FE} *	DC forward current gain	V _{CE} = -5V, I _C = 500mA	150		500	—
V _{CE(sat)}	C to E saturation voltage	I _C = -2A, I _B = -0.2A			-0.5	V
ft	Gain band width product	V _{CE} = -6V, I _E = 10mA		100		MHZ

* : It shows h_{FE} classification in right table.

Item	E	F
h _{FE}	150 to 300	250 to 500

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TYPICAL CHARACTERISTICS



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