

Power Transistor (-80V, -1A)

2SB1260 / 2SB1181 / 2SB1241

Features

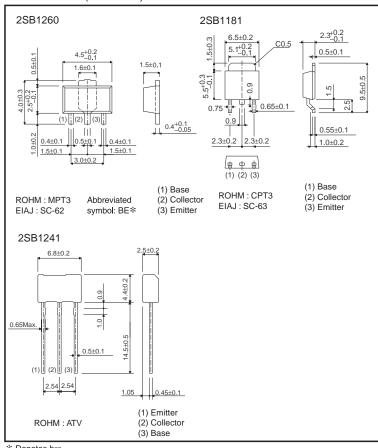
- 1) Hight breakdown voltage and high current. $BV_{CEO} = -80V$, $I_C = -1A$
- 2) Good hee linearty.
- 3) Low VCE(sat).

Complements the 2SD1898 / 2SD1863 / 2SD1733.

●Structure

Epitaxial planar type PNP silicon transistor

●Dimensions (Unit : mm)



* Denotes hre

● Absolute maximum ratings (Ta=25°C)

Parameter		Symbol	Limits	Unit	
Collector-base voltage		Vсво	-80	V	
Collector-emitter voltage		Vceo	-80	V	
Emitter-base voltage		VEBO	-5	V	
Collector current		Ic	-1	A (DC)	
		ICP	-2 *1	A (Pulse)	
Collector power dissipation	2SB1260		0.5	W	
			2 *2		
	2SB1241, 2SB1181	Pc	1 *3		
	2SB1181		10	W (Tc=25°C)	
Junction temperature		Tj	150	°C	
Storage temperature		Tstg	-55 to +150	°C	

^{*1 2}SB1260 : Pw=20ms duty=1/2

2SB1241 : Single pulse, Pw=100ms

^{*2 2}SB1260 : When mounted on a 40×40×0.7 mm ceramic board.

^{\$3} 2SB1241 : Printed circuit board, 1.7mm thick, collector copper plating 100mm 2 or larger.

●Electrical characteristics (Ta=25°C)

Parameter		Symbol	Min.	Тур.	Max.	Unit	Conditions	
Collector-base breakdown voltage		ВУсво	-80	_	_	V	Ic= -50μA	
Collector-emitter breakdown voltage		BVceo	-80	_	_	V	Ic=-1mA	
Emitter-base breakdown voltage		ВУево	-5	_	_	V	Iε= -50μA	
Collector cutoff current		Ісво	_	_	-1	μΑ	Vcb= -60V	
Emitter cutoff current		ІЕВО	_	_	-1	μΑ	V _{EB} = -4V	
Collector-emitter saturation voltage		VCE(sat)	-	_	-0.4	V	$Ic/I_B = -500mA/-50mA$	
DC current transfer ratio	2SB1260, 2SB1181	hFE	120	_	390	_	Vce= -3V, Ic= -0.1A	
	2SB1241	11175	120	_	390	_		
Transition frequency	2SB1181	f⊤	-	100	_	MHz	Vc=-10V, Ie=50mA, f=100MHz	
Output capacitance	2SB1260	Cob	-	20	_	pF	Vcb= -10V Ie=0A	
	2SB1181, 2SB1241	C00	_	25	_	pF	f=1MHz	

●Packaging specifications and hfe

		Package		Taping	
		Code	TL	TV2	T100
Туре	hfe	Basic ordering unit (pieces)	2500	2500	1000
2SB1260	QR		_	_	0
2SB1241	QR		_	0	_
2SB1181	QR		0	_	_

hfe values are classified as follows:

Item	Q	R
hfe	120 to 270	180 to 390

•Electrical characteristic curves

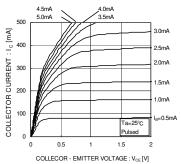
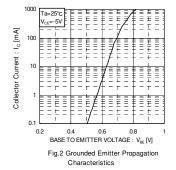


Fig.1 Ground Emitter Output Characteristics



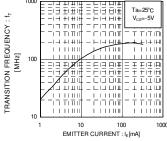


Fig.5 Transition Frewuency vs Emitter Current

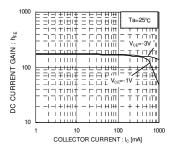


Fig.3 DC Current Gain vs Collector Current

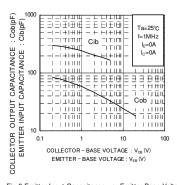


Fig.6 Emitter Input Capacitance vs. Emitter-Base Voltage Collector Output Capacitance vs. Collector-Base

Notes

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