



2SB1151

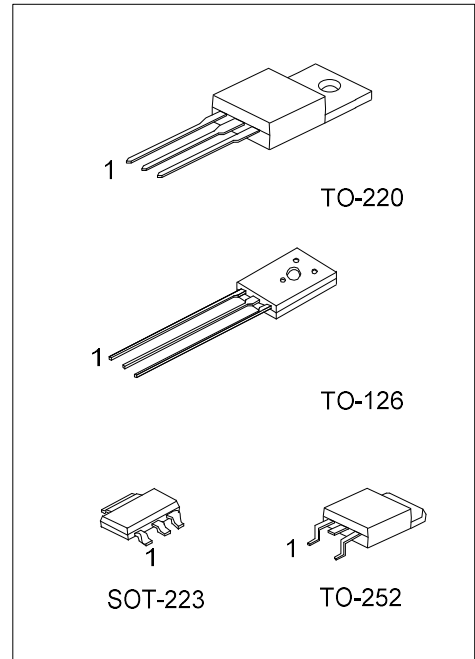
PNP SILICON TRANSISTOR

LOW COLLECTOR SATURATION VOLTAGE LARGE CURRENT

■ FEATURES

*High Power Dissipation

*Complementary to 2SD1691



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SB1151L-x-AA3-R	2SB1151G-x-AA3-R	SOT-223	E	C	B	Tape Reel
2SB1151L-x-TA3-T	2SB1151G-x-TA3-T	TO-220	B	C	E	Tube
2SB1151L-x-T60-K	2SB1151G-x-T60-K	TO-126	E	C	B	Bulk
2SB1151L-x-TN3-R	2SB1151G-x-TN3-R	TO-252	B	C	E	Tape Reel

Note: Pin Assignment: E: Emitter C: Collector B: Base

	(1)Packing Type	(1) R: Tape Reel, T: Tube, K: Bulk
	(2)Package Type	(2) AA3: SOT-223, TA3: TO-220, TN3: TO-252 T60: TO-126
	(3)Rank	(3) x: refer to Classification of h _{FE2}
	(4)Green Package	(4) G: Halogen Free and Lead Free, L: Lead Free

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PNP SILICON TRANSISTOR

MARKING

PACKAGE	MARKING
SOT-223	2SB1151□ □□□□ 1 L: Lead Free G: Halogen Free Date Code
TO-126	UTC□□□□ 2SB1151□ 1 Date Code L: Lead Free G: Halogen Free
TO-220 / TO-252	UTC 2SB1151□ □□ □□□□ Lot Code ← 1 L: Lead Free G: Halogen Free Date Code

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

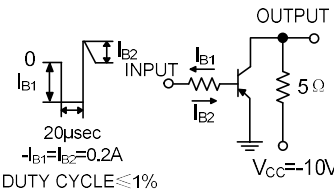
PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V _{CBO}	-60	V
Collector-Emitter Voltage		V _{CEO}	-60	V
Emitter-Base Voltage		V _{EBO}	-7	V
Collector Current	DC	I _C	-5	A
	Pulse(Note2)	I _{CP}	-8	A
Base Current		I _B	-1	A
Power Dissipation (T _A =25°C)	SOT-223	P _D	1	W
	TO-220		2	W
	TO-126		1.3	W
	TO-252			
Junction Temperature		T _J	+150	°C
Storage Temperature		T _{STG}	-55 ~ +150	°C

Note 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2. P_W ≤ 10ms, Duty Cycle ≤ 50%.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

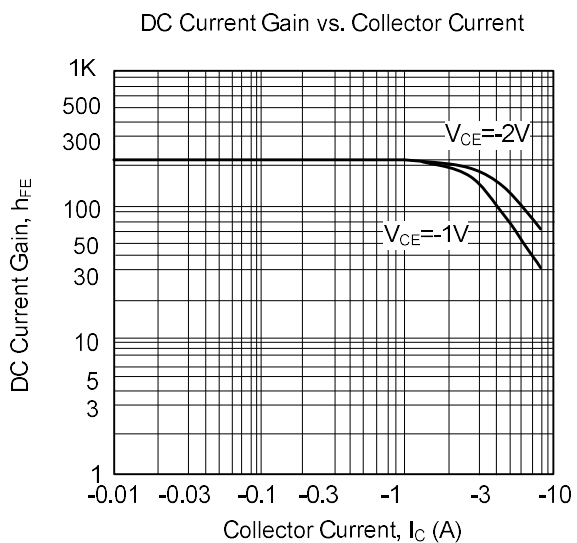
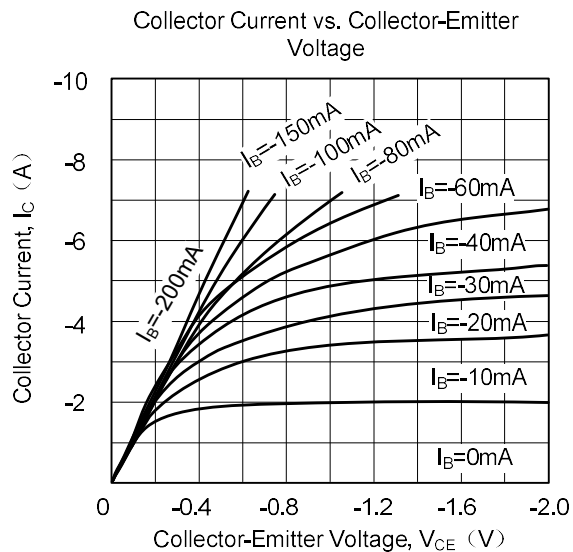
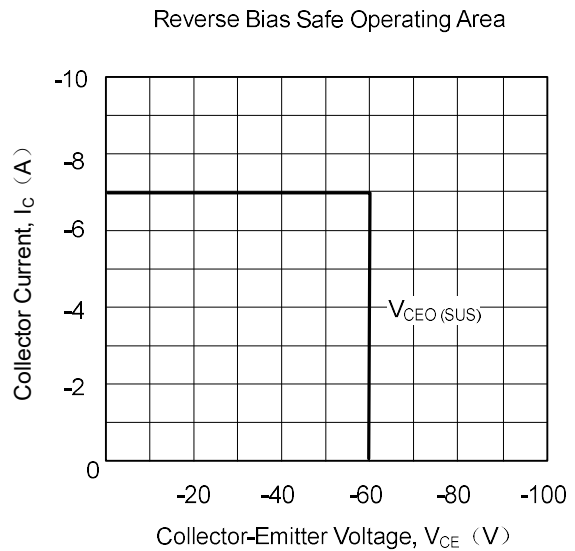
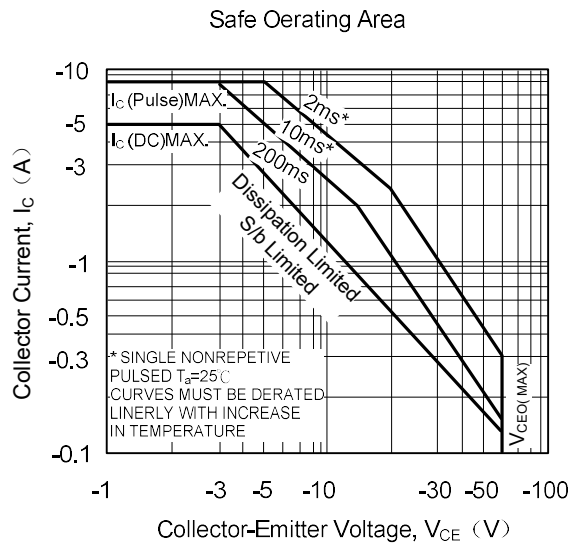
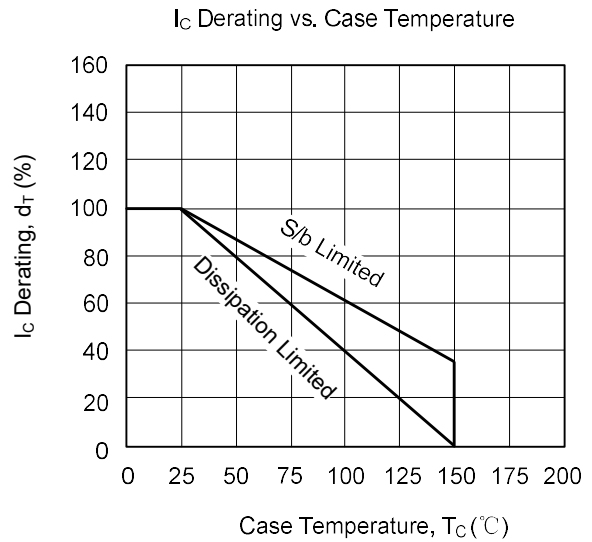
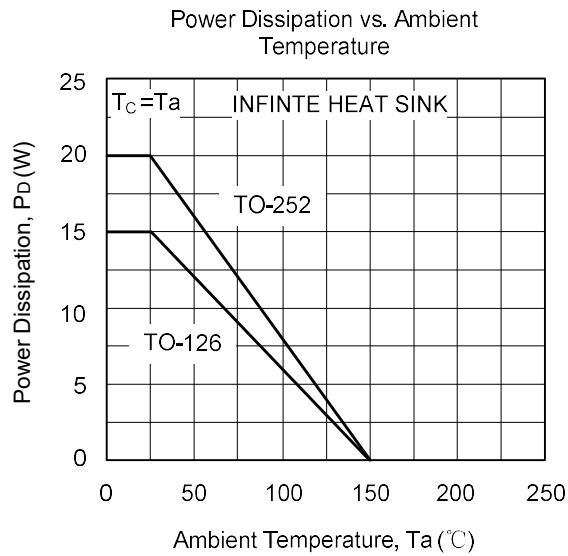
PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Voltage		BV _{CBO}	I _C =-100uA, I _E =0	-60			V
Collector-Emitter Voltage		BV _{CEO}	I _C =-1mA, I _B =0	-60			V
Emitter-Base Voltage		BV _{EBO}	I _E =-100uA, I _C =0	-7			V
Collector Cut-off Current		I _{CBO}	V _{CB} =-50V, I _E =0			-10	μA
Emitter Cut-off Current		I _{EBO}	V _{EB} =-7V, I _C =0			-10	μA
Collector-Emitter Saturation Voltage		V _{CE(SAT)}	I _C =-2A, I _B =-0.2A		-0.14	-0.3	V
Base-Emitter Saturation Voltage		V _{BE(SAT)}	I _C =-2A, I _B =-0.2A		-0.9	-1.2	V
DC Current Gain		h _{FE1}	V _{CE} =-1V, I _C =-0.1A	60			
		h _{FE2}	V _{CE} =-1V, I _C =-2A	160		400	
		h _{FE3}	V _{CE} =-2V, I _C =-5A	50			
Switching Time	Turn On Time	t _{ON}			0.15	1	μS
	Storage Time	t _{STG}			0.78	2.5	μS
	Fall Time	t _F			0.18	1	μS

Pulse test : P_W ≤ 350 μS, Duty Cycle ≤ 2% Pulse.

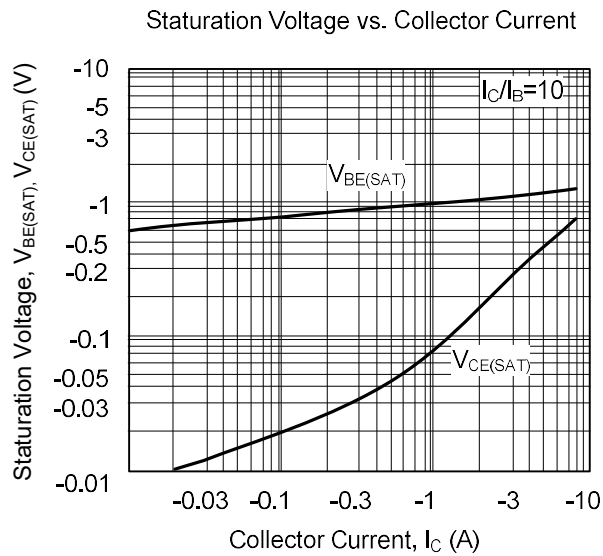
■ CLASSIFICATION OF h_{FE2}

RANK	O	Y
RANGE	160 ~ 320	200 ~ 400

■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS (Cont.)



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