



UNISONIC TECHNOLOGIES CO., LTD

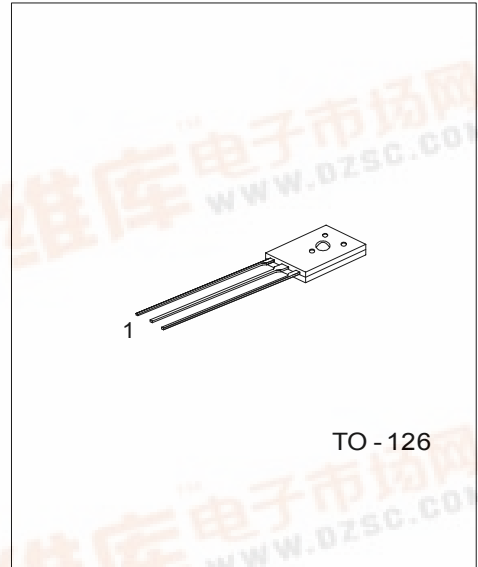
2SB1151

PNP EPITAXIAL SILICON TRANSISTOR

LOW COLLECTOR
SATURATION VOLTAGE
LARGE CURRENT

FEATURES

- *High Power Dissipation : $P_D=1.5W(T_a=25^\circ C)$
- *Complementary to 2SD1691.



TO - 126

*Pb-free plating product number: 2SB1151L

PIN CONFIGURATION

PIN NO.	PIN NAME
1	Emitter
2	Collector
3	Base

ORDERING INFORMATION

Order Number		Package	Packing
Normal	Lead free		
2SB1151-T60-T	2SB1151L-T60-T	TO-126	Tube

2SB1151

PNP EPITAXIAL SILICON TRANSISTOR

■ ABSOLUTE MAXIMUM RATING (Ta=25)

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
	Pulse(Note 3)	I_{CP}	-8
Base Current	I_B	-1	A
Power Dissipation	Ta=25	P_D	1.5
	Tc=25		20
Junction Temperature	T_J	125	□
Operating Temperature	T_{OPR}	0 ~ +70	□
Storage Temperature	T_{STG}	-40 ~ +150	□

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

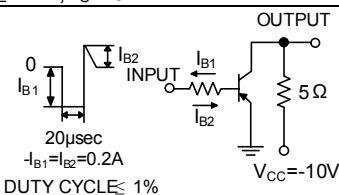
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2. The device is guaranteed to meet performance specification within 0 ~ 70 operating temperature range and assured by design from -40 ~ 85 .

3. PW ≤ 10ms, Duty Cycle ≤ 50%

■ ELECTRICAL CHARACTERISTICS (Ta=25 , unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
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	
	Fall Time	t_F		0.18	1	

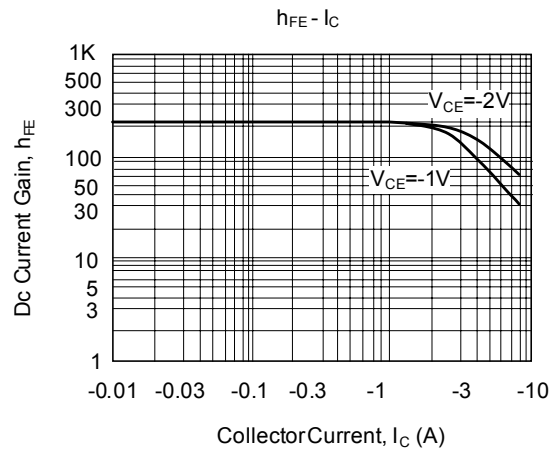
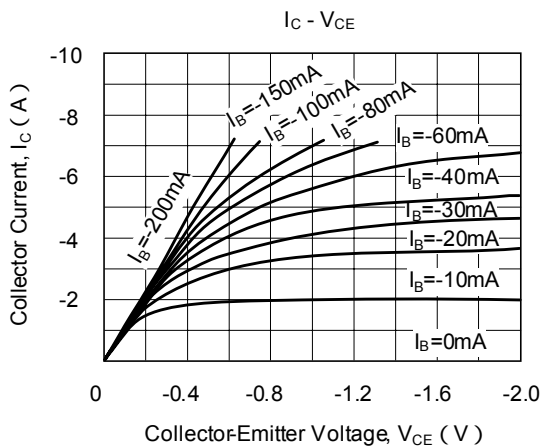
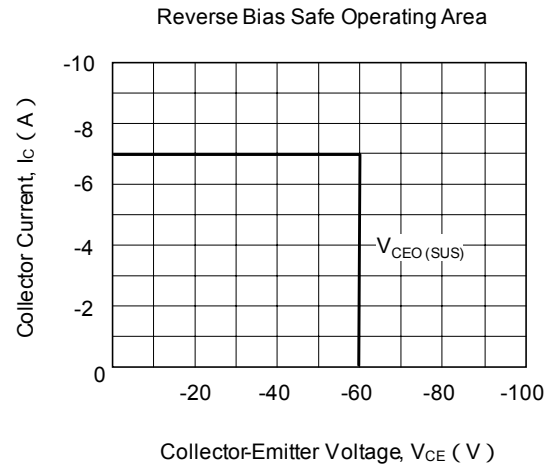
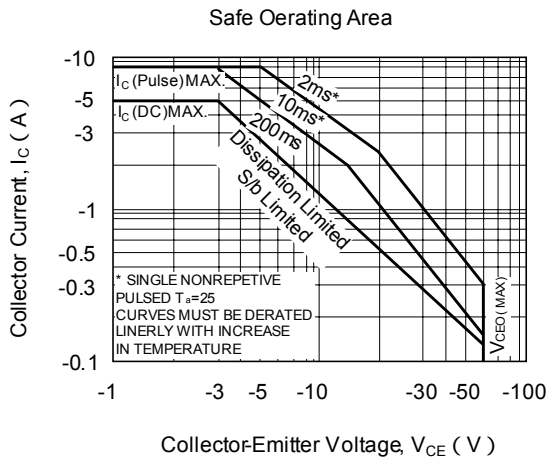
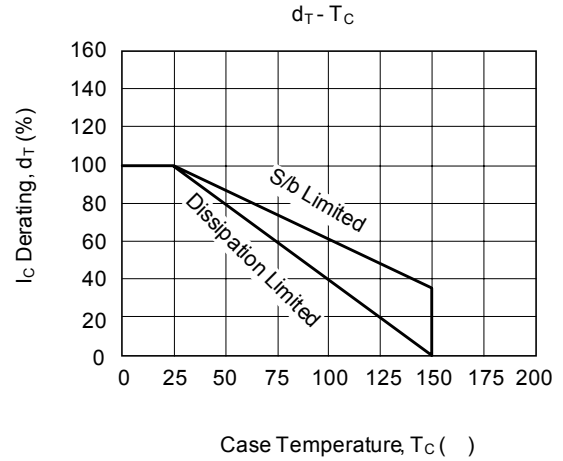
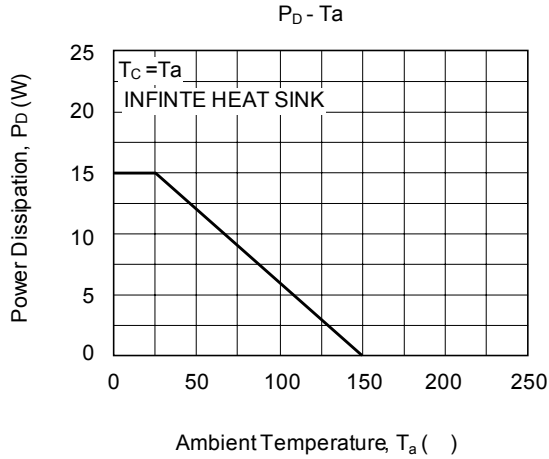


Pulse test : PW ≤ 350 μS, Duty Cycle ≤ 2% Pulse

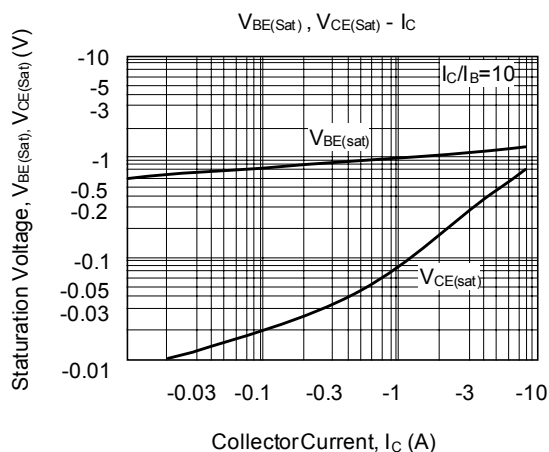
■ CLASSIFICATION OF hFE2

RANK	O	Y
RANGE	160 ~ 320	200 ~ 400

■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS



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