

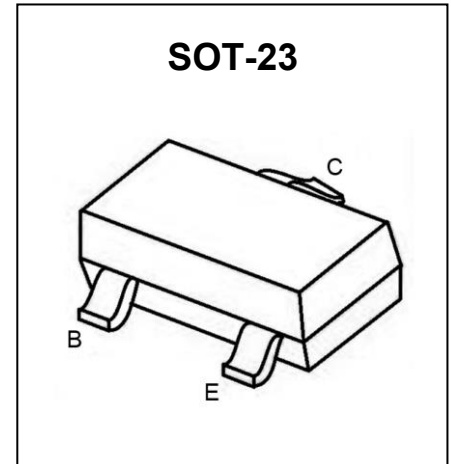


GPB4401 Transistor(NPN)

Feature

- Switching Transistor

Making: 2X



MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

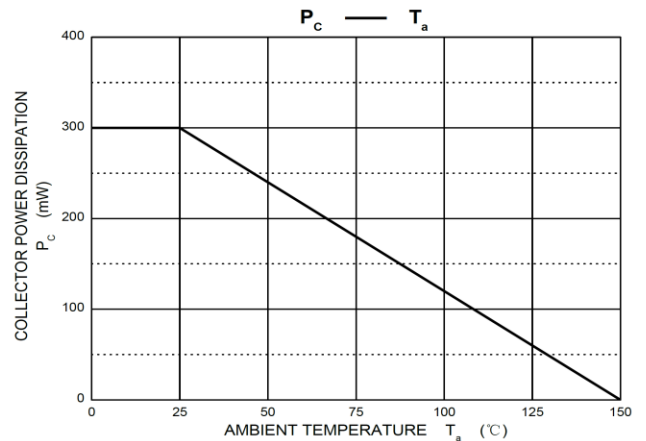
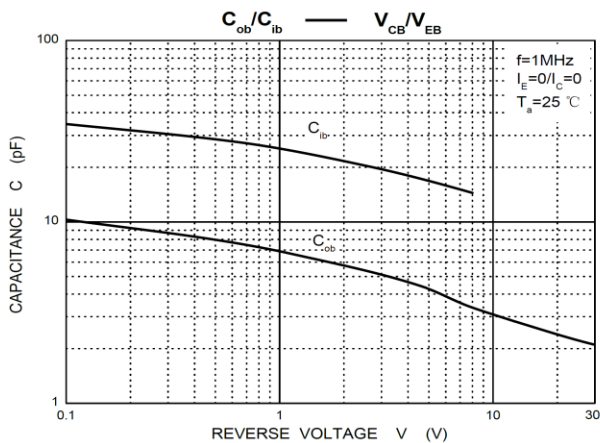
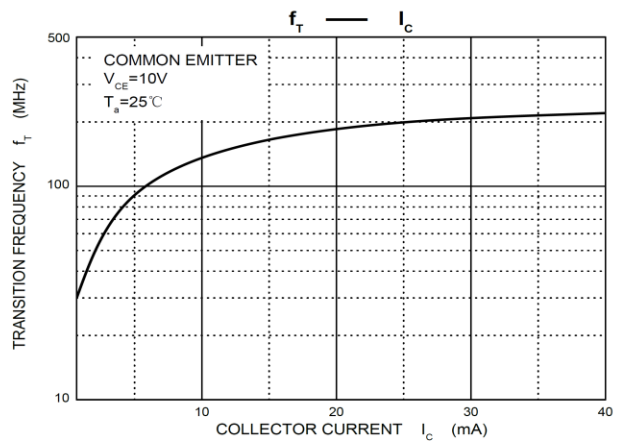
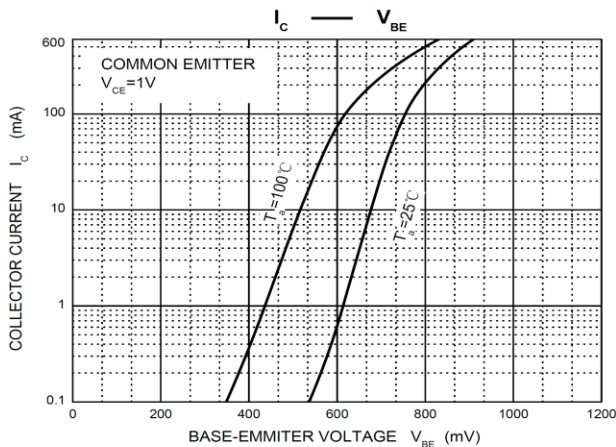
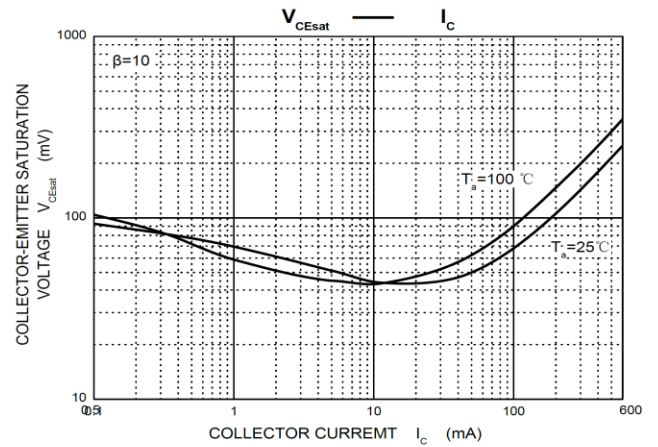
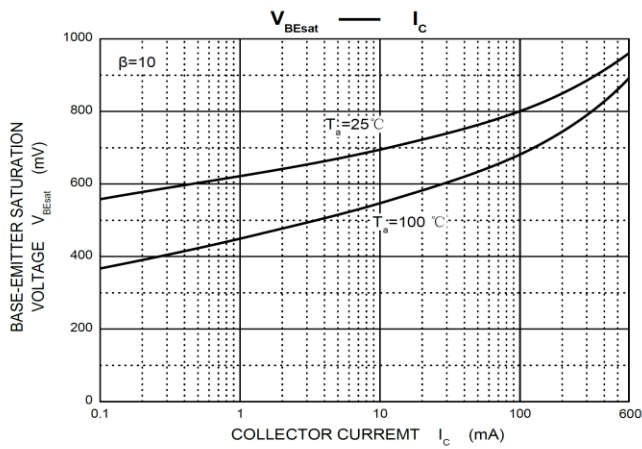
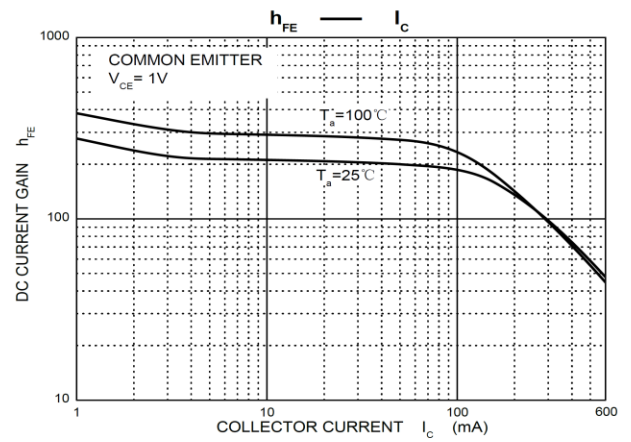
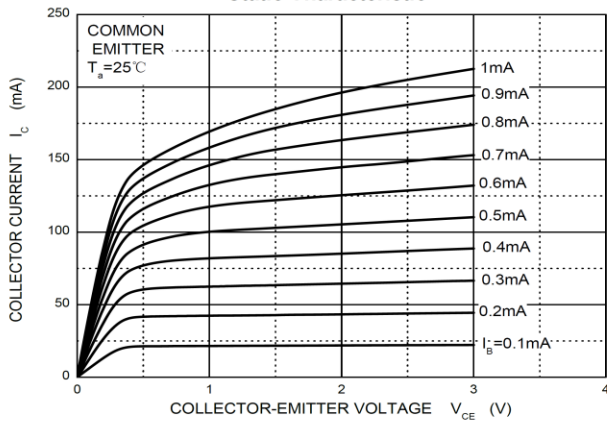
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CB0}	60	V
Collector-Emitter Voltage	V _{CEO}	40	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current -Continuous	I _C	0.6	A
Power Dissipation	P _d	0.3	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~ +150	°C

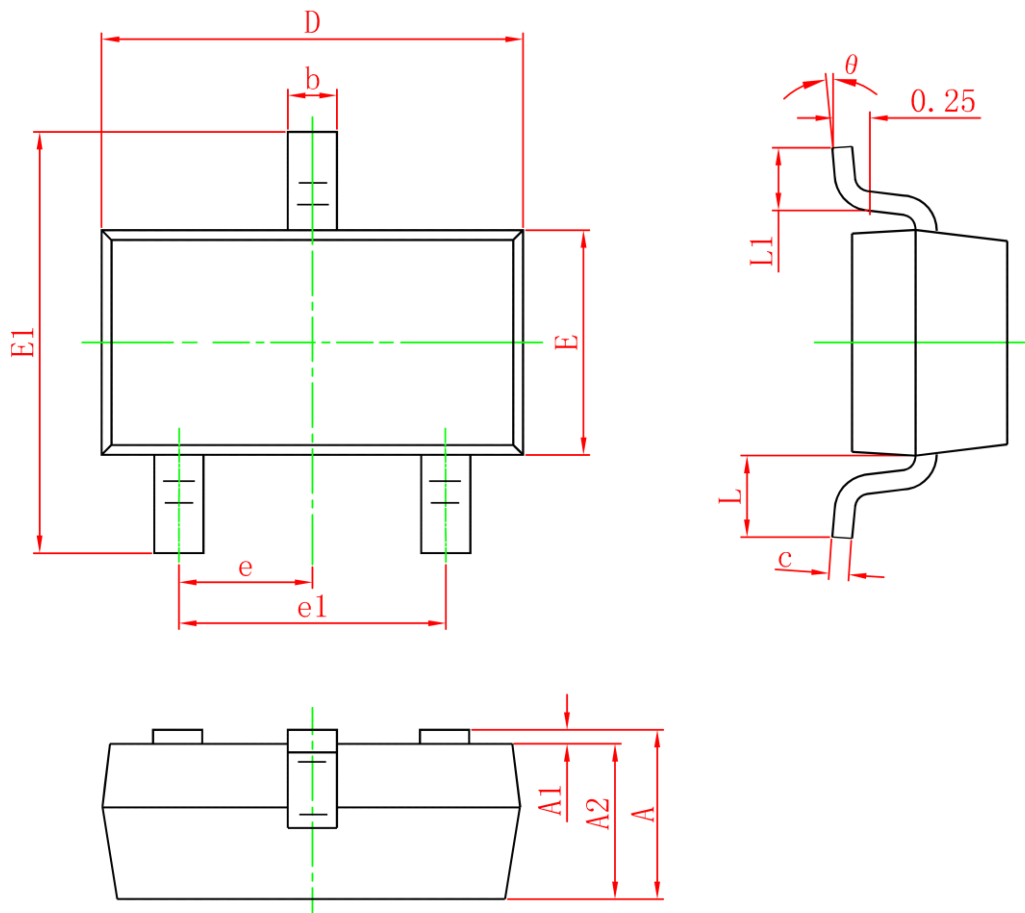
ELECTRICAL CHARACTERISTICS(T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	V _{(BR)CBO}	I _C =100μA, I _E =0	60		V
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	40		V
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	6		V
Collector Cut-Off Current	I _{CB0}	V _{CB} =50V, I _E =0		0.1	μA
Collector Cut-Off Current	I _{CEx}	V _{CE} =35V, V _{EB} =0.4V		0.1	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =5V, I _C =0		0.1	μA
DC Current Gain	h _{FE1}	V _{CE} =1V, I _C =0.1mA	20		
	h _{FE2}	V _{CE} =1V, I _C =1mA	40		
	h _{FE3}	V _{CE} =1V, I _C =10mA	80		
	h _{FE4}	V _{CE} =1V, I _C =150mA	100	300	
	h _{FE5}	V _{CE} =2V, I _C =500mA	40		
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =150mA, I _B =15mA		0.4	V
		I _C =500mA, I _B = 50mA		0.75	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =150mA, I _B =15mA		0.95	V
		I _C =500mA, I _B = 50mA		1.2	V
Transition Frequency	f _t	V _{CE} = 10V, I _C =20mA, f =100MHz	250		MHZ

Typical Characteristics

Static Characteristic



SOT-23 Package Information


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0	0.100	0	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.150	1.500	0.045	0.059
E1	2.250	2.650	0.089	0.104
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Attention:

- GreenPower Electronics reserves the right to improve product design function and reliability without notice.
- Any and all semiconductor products have certain probability to fail or malfunction, which may result in personal injury, death or property damage. Customers are solely responsible for providing adequate safe measures when design their systems.
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