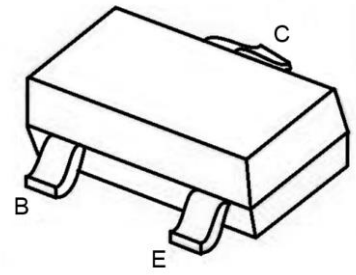
GP ELECTRONICS

GPB5401

GPB5401 Transistor(PNP)

SOT-23



Feature

- Small Surface Mount Package

Marking：2L

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-160	V
Collector-Emitter Voltage	V_{CEO}	-150	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-0.6	A
Power Dissipation	P_d	0.625	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55~ +150	℃

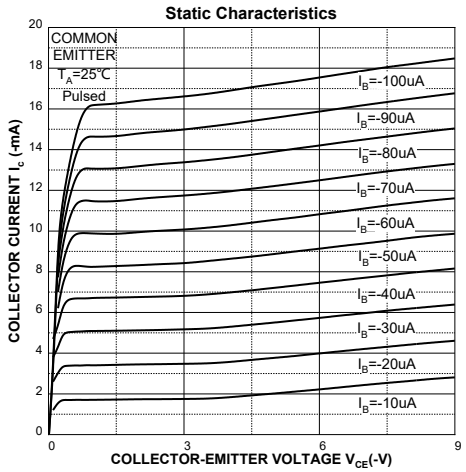
ELECTRICAL CHARACTERISTICS(T_A=25℃ unless otherwise noted)

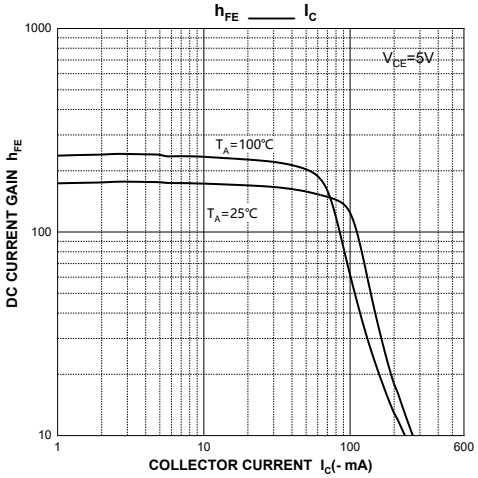
Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = -100μA ,I_E = 0	-160		V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = -100μA , I_B = 0	-150		V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = -100μA,I_C = 0	-5		V
Collector Cut-Off Current	I_{CBO}	V_{CB} = -140V, I_E = 0		-0.1	μA
Emitter-Base Cut-Off Current	I_{EBO}	V_{EB} = -4V,I_C = 0		-0.1	μA
DC Current Gain	h_{FE}	V_{CE} = -5V, I_C = -1mA	80		
		V_{CE} = -5V, I_C = -10mA	100	300	
		V_{CE} = -5V, I_C = -50mA	50		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = -10mA, I_B = -1mA		-0.2	V
		I_C = -50mA, I_B = -5mA		-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = -10mA, I_B = -1mA		-1	V
		I_C = -50mA, I_B = -5mA		-1	V
Transition Frequency	f_T	V_{CE} = -5V, I_C = -10mA, f = 30MHz	100		MHZ

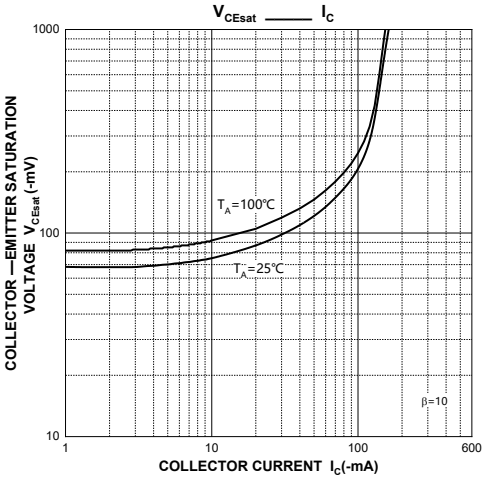
CLASSIFICATION OF h_{FE}

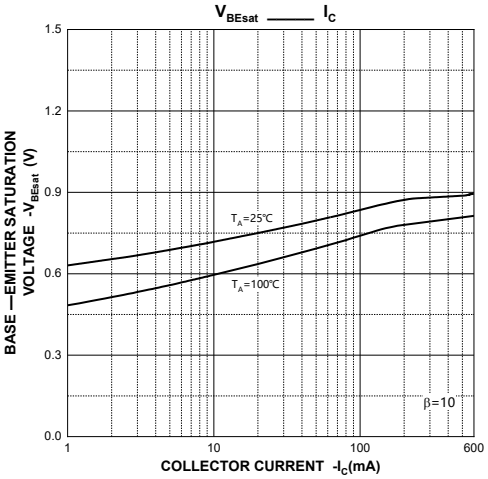
RANK	L	H
RANGE	100-200	200-300

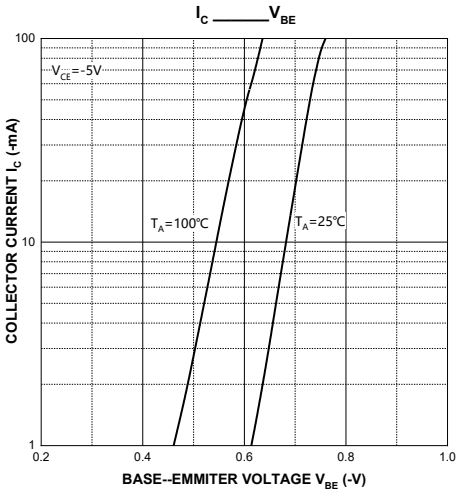
Typical Characteristics

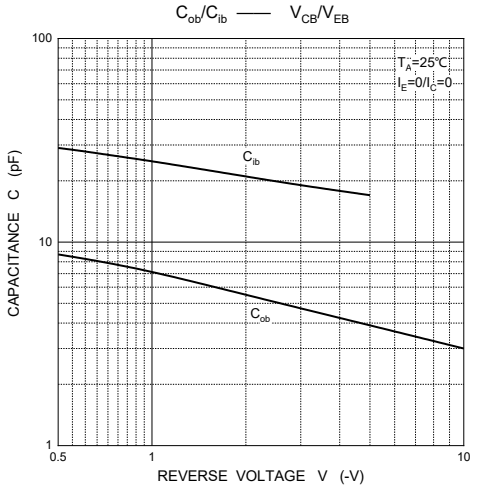




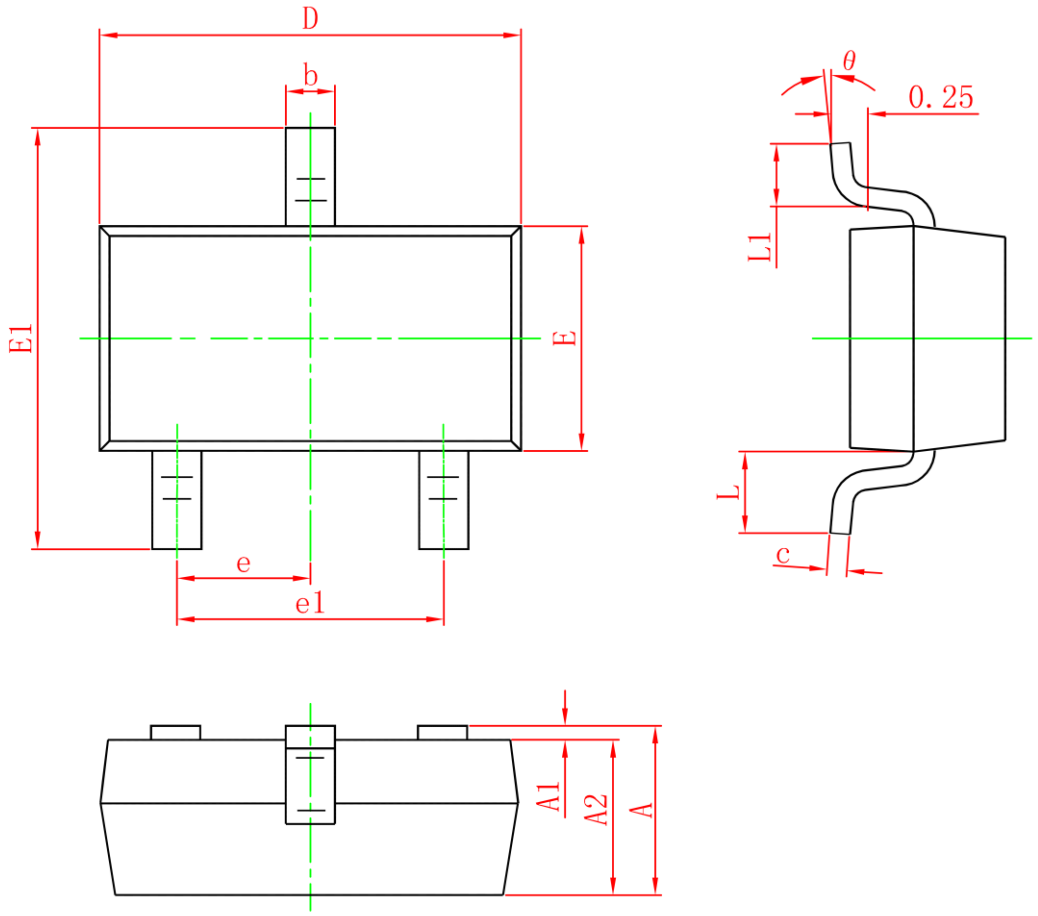








SOT-23 Package Information



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. Customer are solely responsible for providing adequate safe measures when design their systems.
- GreenPower Electronics products belong to consumer electronics or other civilian electronic products.