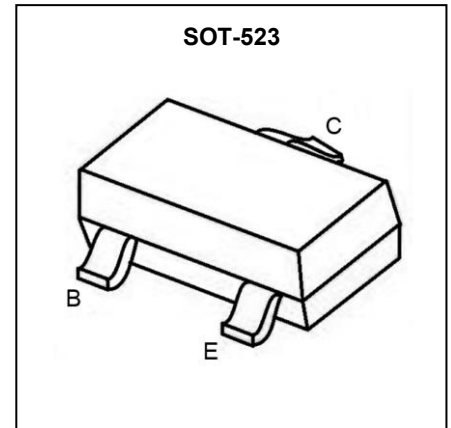




2SC4617 Transistor(NPN)

Feature

- Collector current: $I_C=0.15A$
- Capable of 150mWatts of Power Dissipation



MAXIMUM RATINGS ($T_A=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current -Continuous	I_C	0.15	A
Power Dissipation	P_d	0.15	W
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	833	$^{\circ}C/W$
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55~ +150	$^{\circ}C$

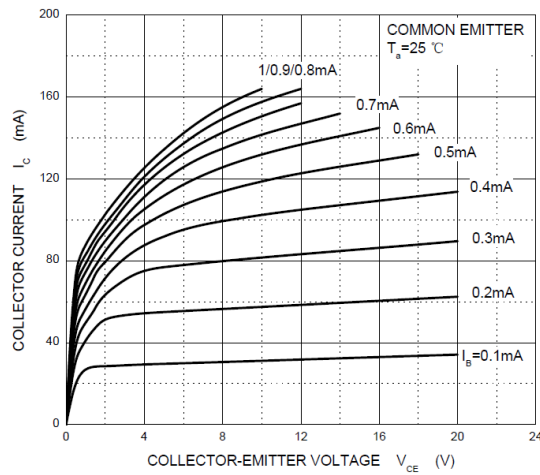
ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=50\mu A, I_E=0$	60			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	50			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=50\mu A, I_C=0$	7			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=60V, I_E=0$			0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=7V, I_C=0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=6V, I_C=1mA$	120		560	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$			0.4	V
Transition Frequency	f_T	$V_{CE}=12V, I_C=2mA, f=100MHz$		180		MHz
Output Capacitance	C_{ob}	$V_{CB}=12V, I_E=0, f=1MHz$			3.5	pf

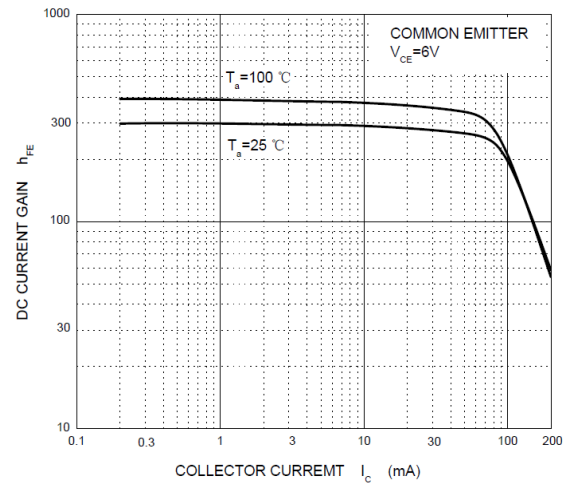
CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Range	120-270	180-390	270-560
Marking	BQ	BR	BS

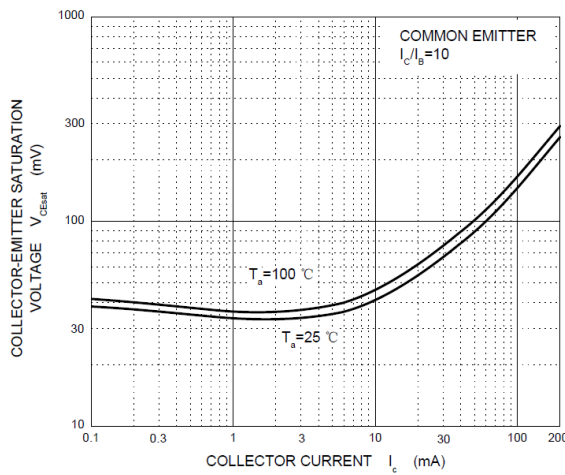
Typical Characteristics



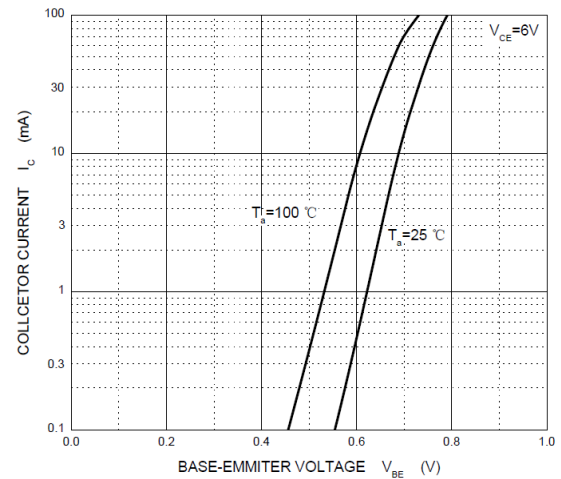
I_c — V_{CE}



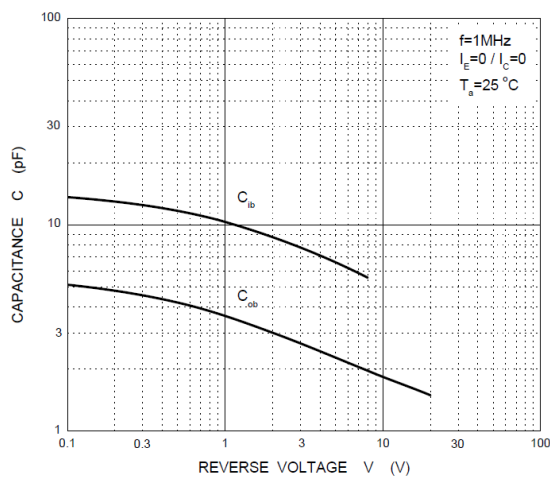
h_{FE} — I_c



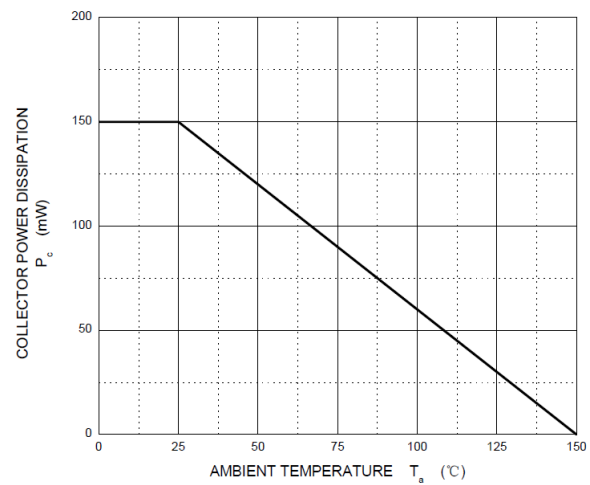
V_{CEsat} — I_c



I_c — V_{BE}

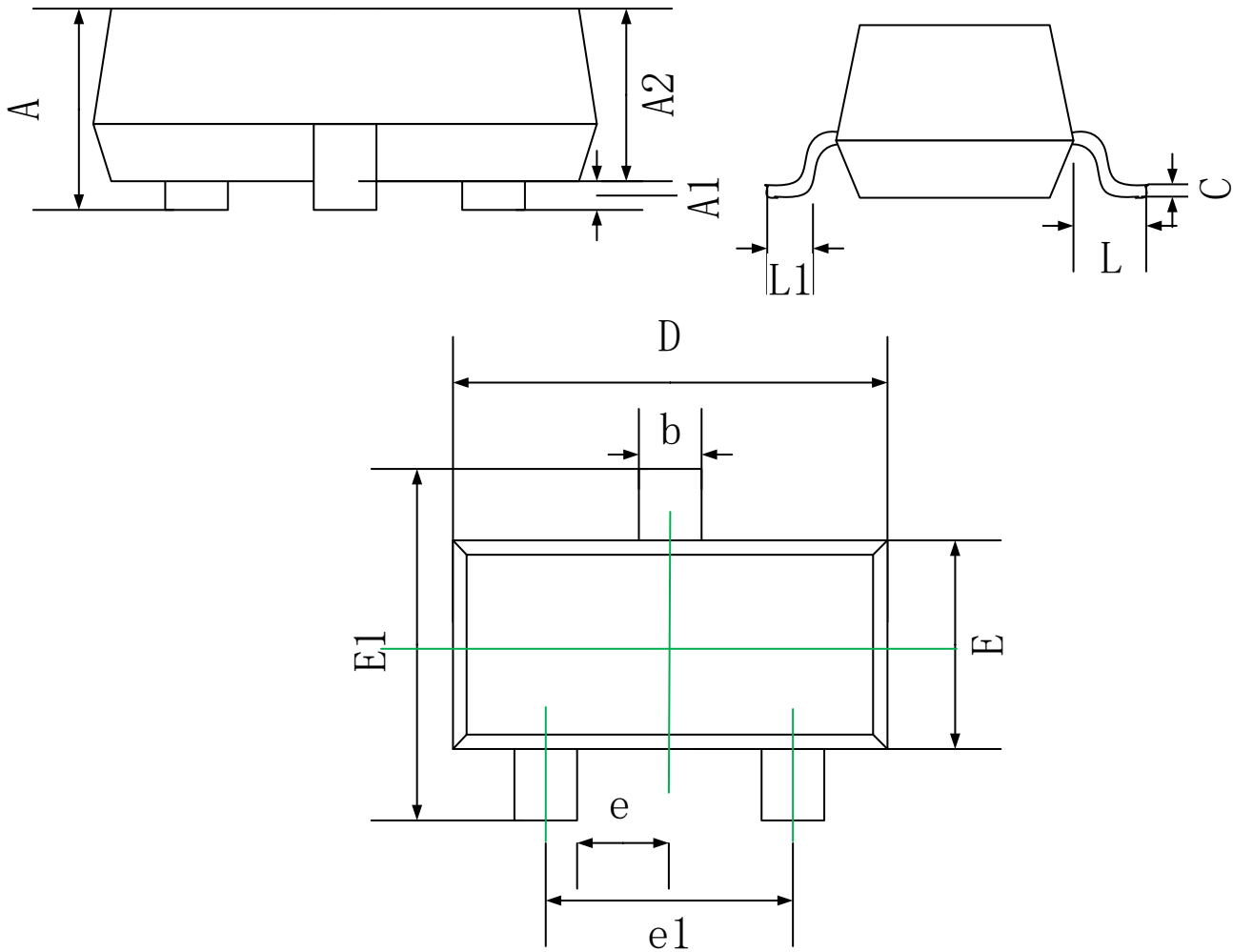


C_{ob}/C_{ib} — V_{CB}/V_{EB}



P_c — T_a

SOT-523 Package Information



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.70	0.90
A1	0.00	0.10
A2	0.70	0.80
b	0.25	0.35
c	0.10	0.20
D	1.50	1.70
E	0.70	0.90
E1	1.45	1.75
e	0.50 TYP.	
e1	0.90	1.10
L	0.40 REF.	
L1	0.26	0.46

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.
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