



**GP**  
**ELECTRONICS**

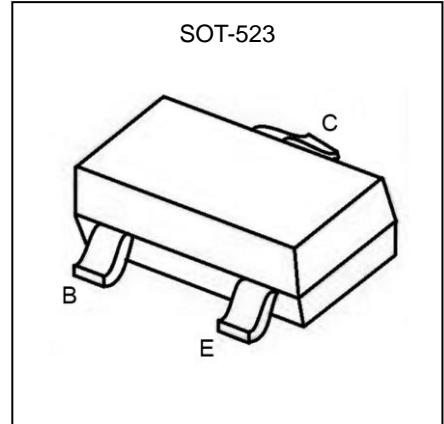
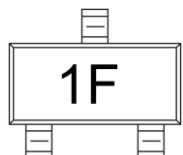
**2SC4617**

## **2SC4617 Transistor(NPN)**

### **Feature**

- Low Cob: 2.0pF(Typ)

### **Marking: 1F**



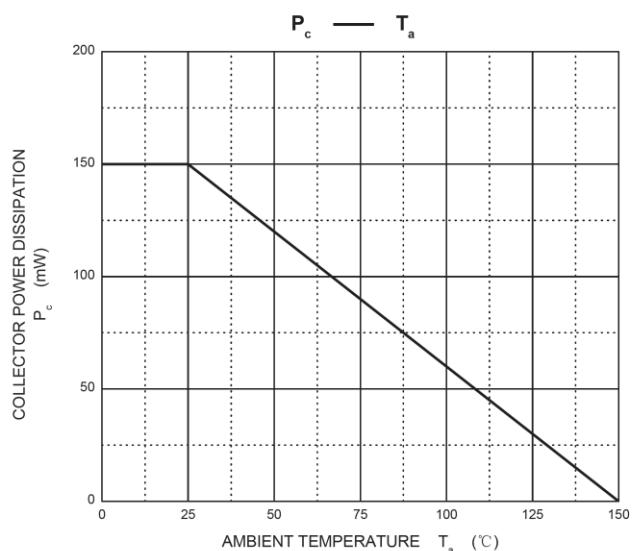
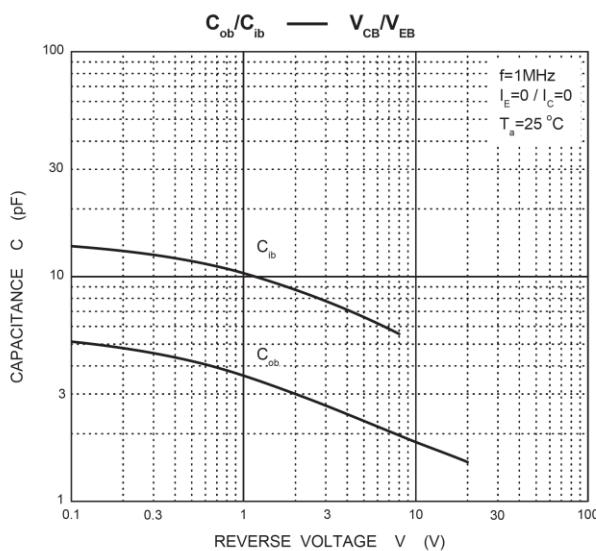
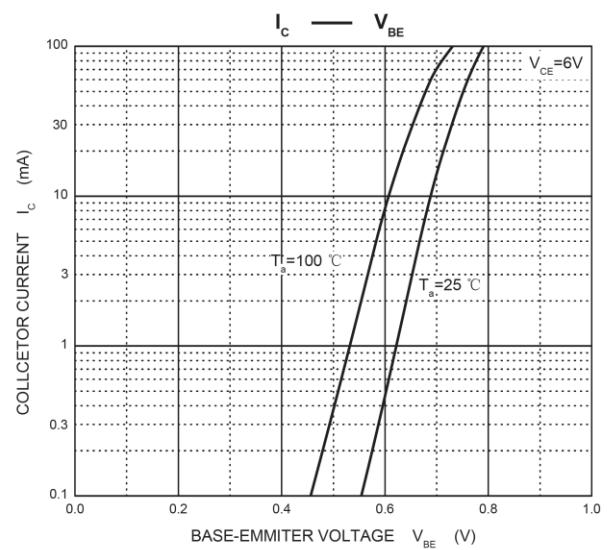
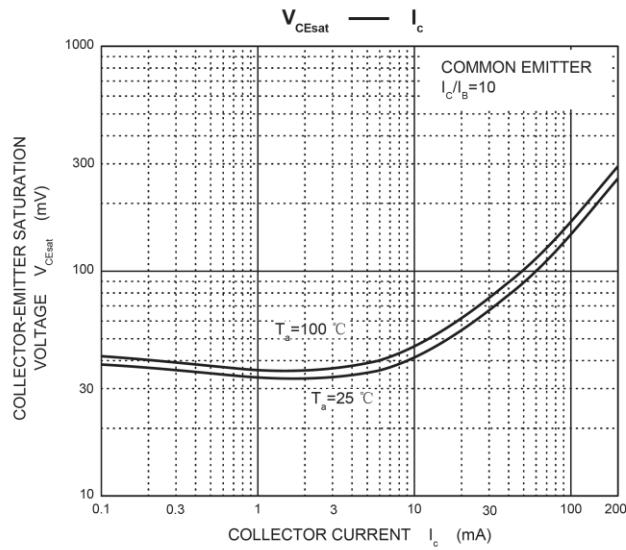
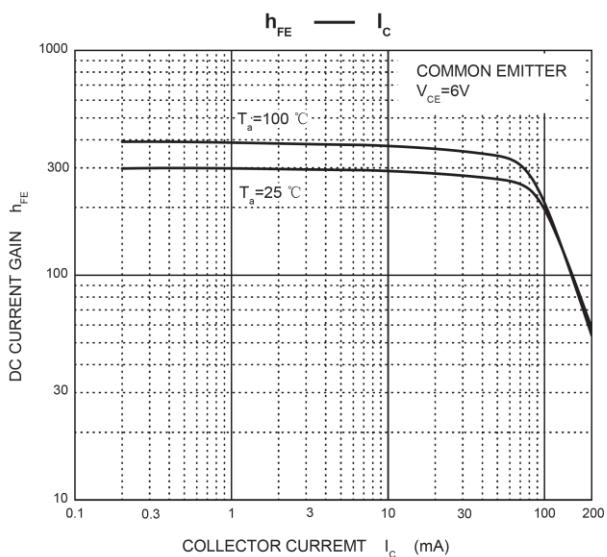
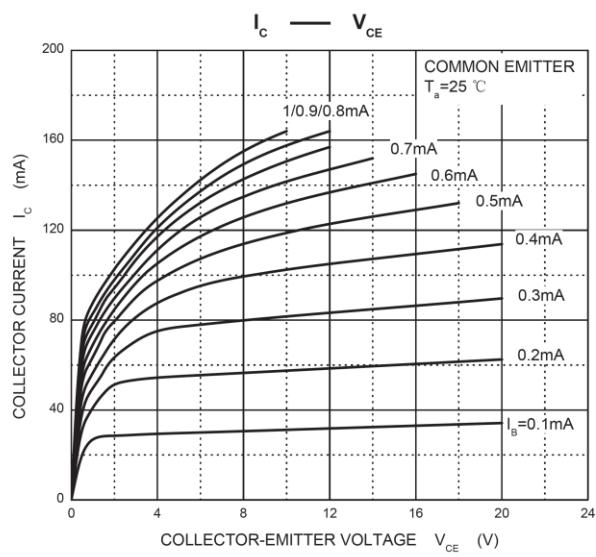
### **MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)**

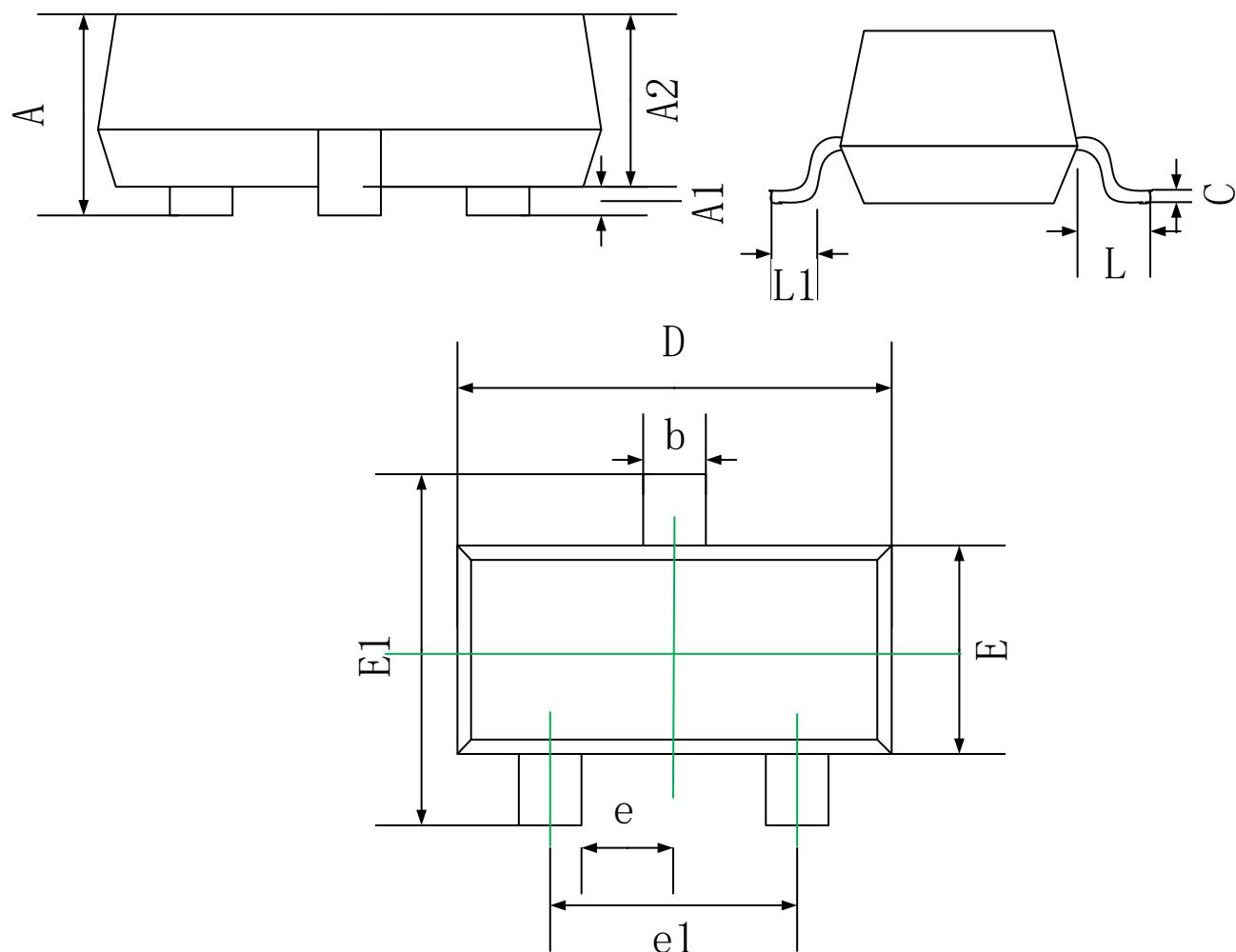
Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	60	V
Collector-Emitter Voltage	$V_{CEO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	7	V
Collector Current -Continuous	$I_C$	0.15	A
Power Dissipation	$P_d$	0.15	W
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-45~ +150	$^\circ\text{C}$

### **ELECTRICAL CHARACTERISTICS( $T_a=25^\circ\text{C}$ unless otherwise noted)**

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu\text{A}, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu\text{A}, I_C=0$	7			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=60\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=7\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE1}$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.4	V
Transition frequency	$f_T$	$V_{CE}=12\text{V}, I_C=2\text{mA}, f = 100\text{MHz}$		200		MHZ
Output Capacitance	$C_{ob}$	$V_{CB} = 12\text{V}, I_E=0, f = 100\text{MHz}$			3.5	$\text{pf}$

## Typical Characteristics



**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	0.30=5
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