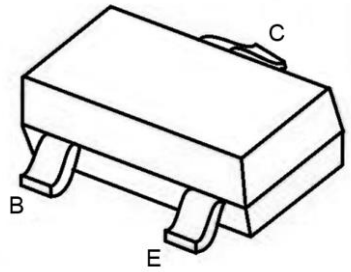
2SA1037 Transistor(PNP)

SOT-23



Feature

- Excellent h_{FE} linearity
- Complementary NPN Type Available(2SC2412)

Rank	Q	R	S
Range	120~270	180~390	270~560
Marking	FQ	FR	FS

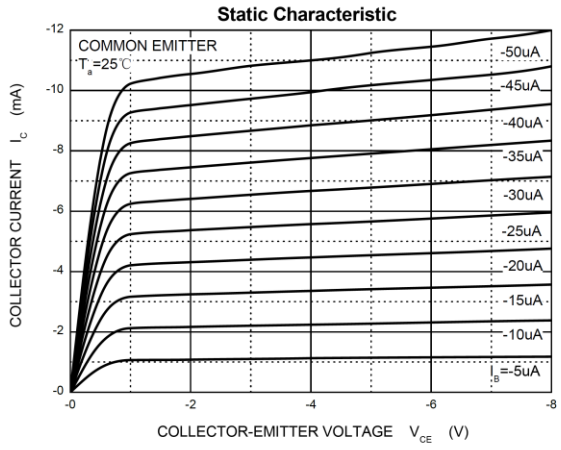
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

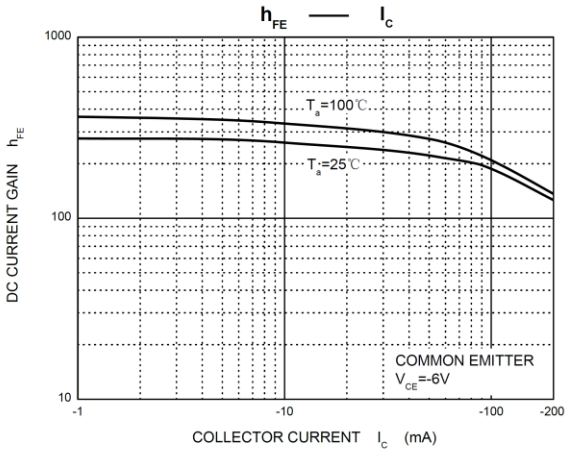
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current -Continuous	I_C	-0.1	A
Power Dissipation	P_d	0.2	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55~ +150	℃

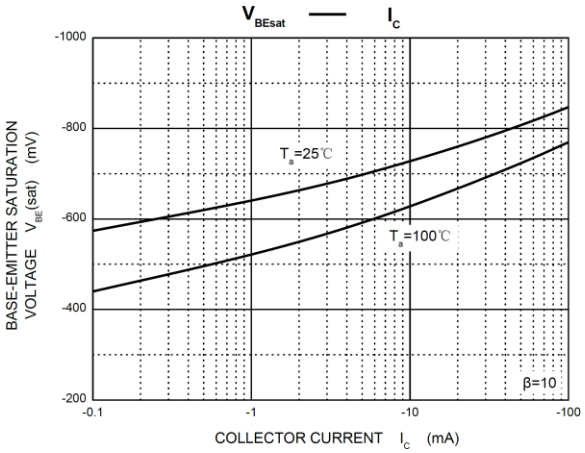
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise noted)

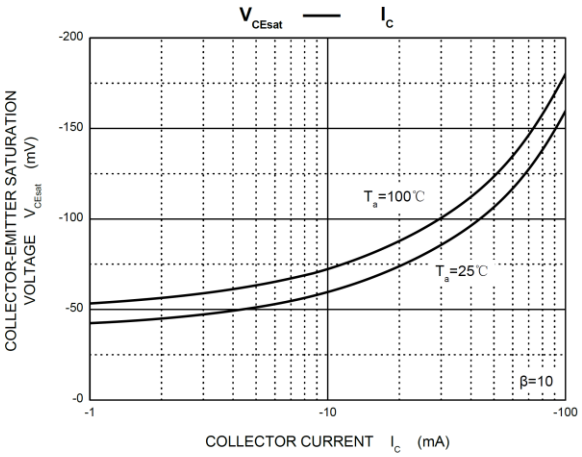
Parameter	Symbol	Test Condition	Min		Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-50μA ,I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA , I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-50μA,I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-60V, I_E=0			-100	nA
Emitter cut-off current	I_{CEO}	V_{CE}=-6V, I_C=0			-100	nA
DC current gain	h_{FE}	V_{CE}=-6V, I_C=-10mA	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-50mA, I_B= -5mA			-0.5	V
Output Capacitance	C_{OB}	V_{CB}=-12V, f=1.0MHz, I_E= 0		4.0	5.0	pf
Transition frequency	f_T	V_{CE}= -12V, I_C=-2mA, f=12MHz		180		MHZ

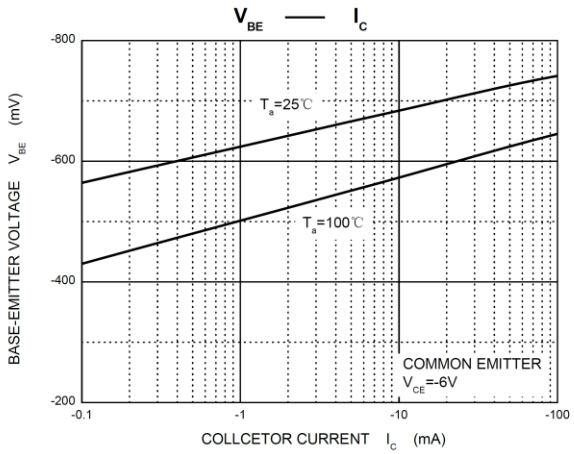
Typical Characteristics

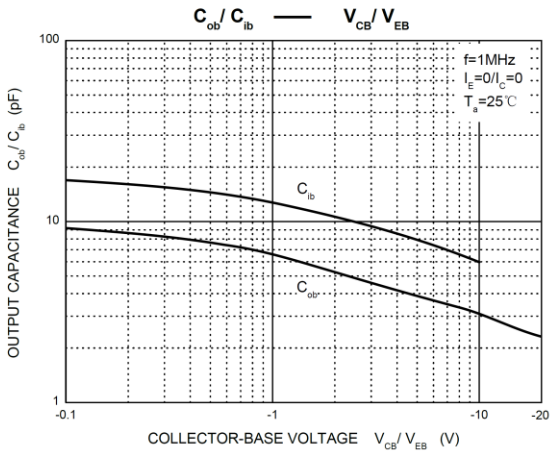


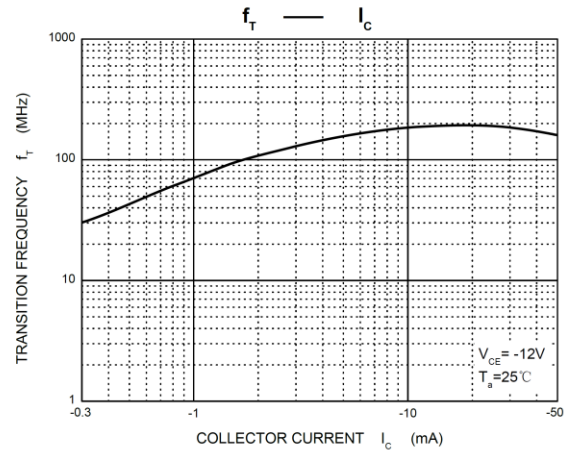


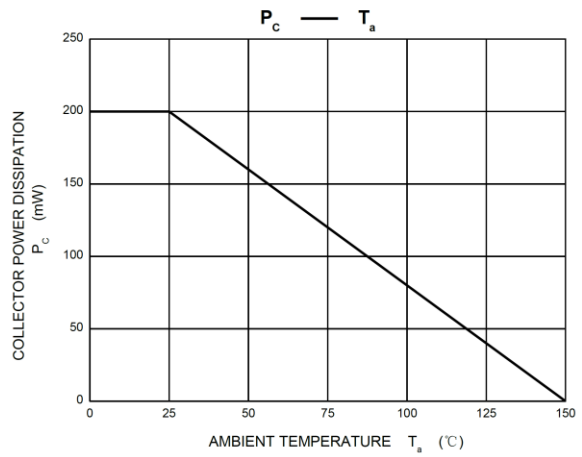




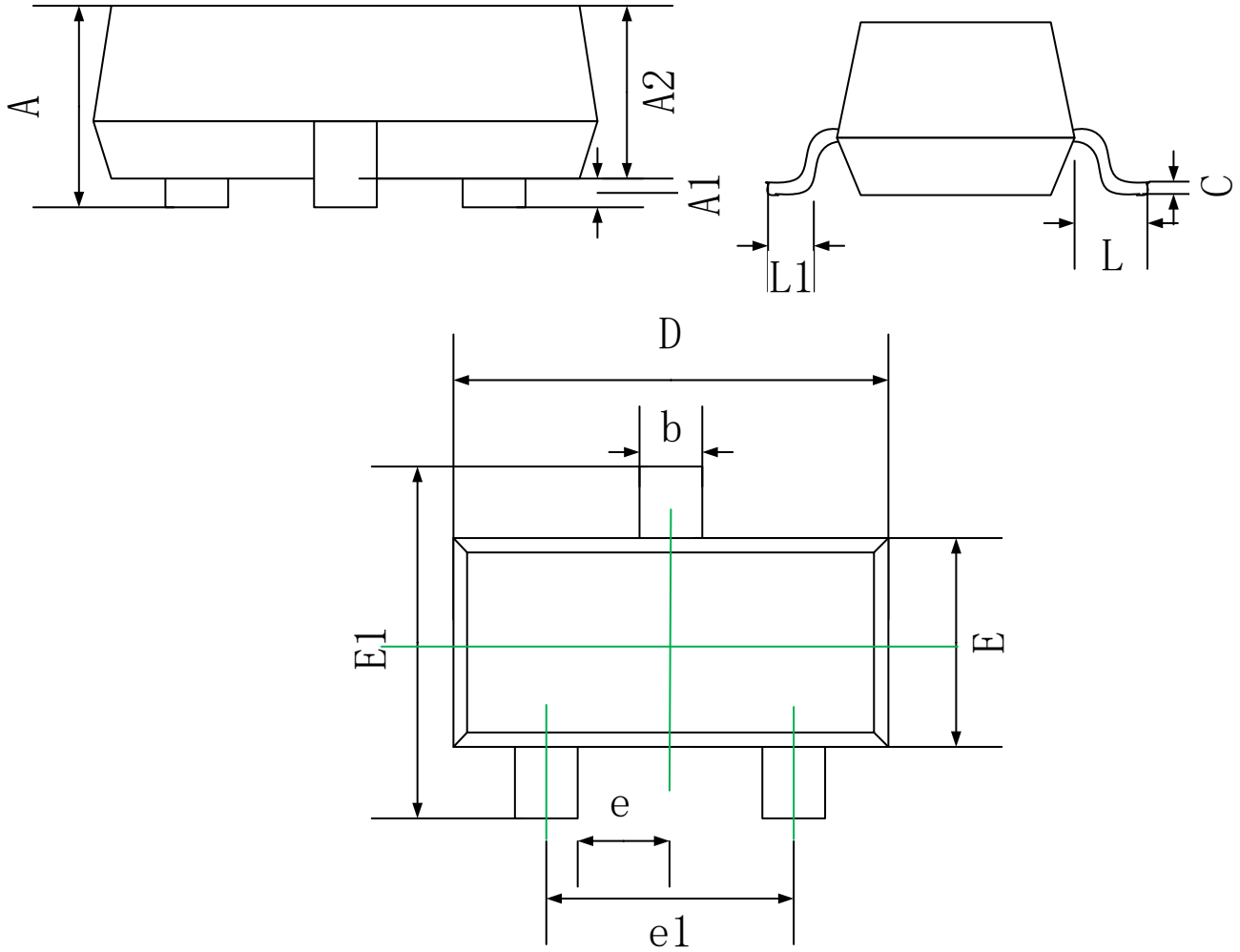








SOT-23 Package Information



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50