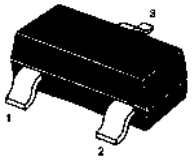
迈拓电子
MAITUO ELECTRONIC

C1815 TRANSISTOR (NPN)

COLLECTOR



BASE

EMITTER

FEATURE

Power dissipation

MARKING : HF

SOT-23

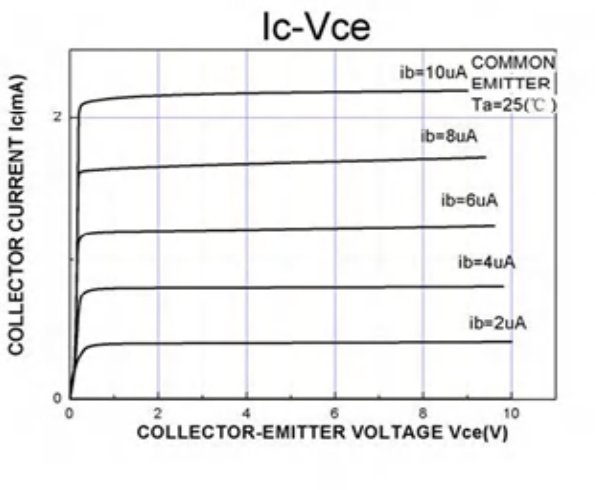
MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

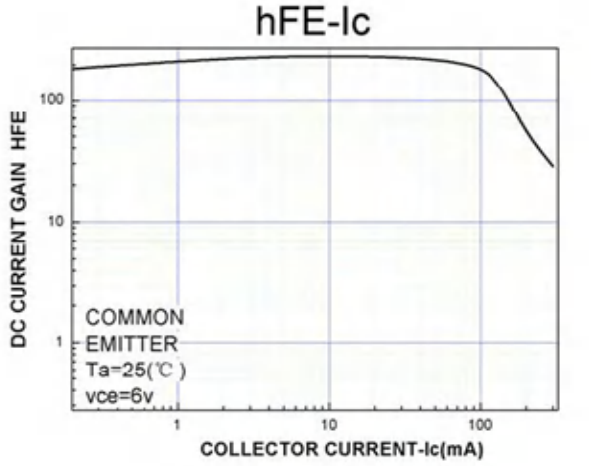
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	150	mA
P_C	Collector Power Dissipation	200	mW
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

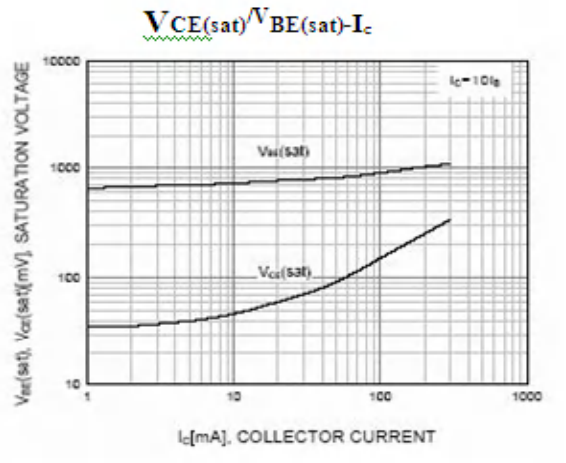
ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

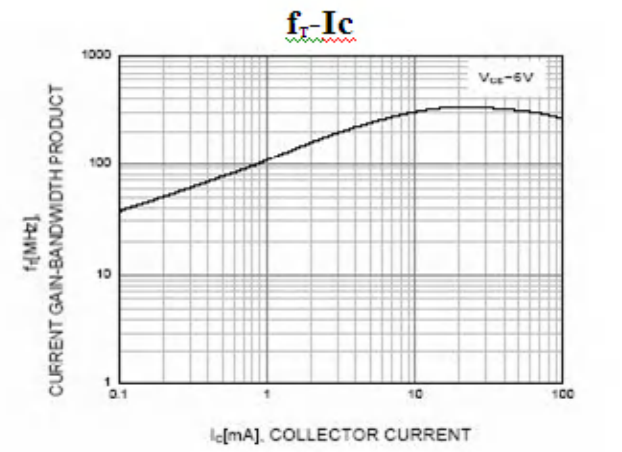
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 100μA, I_E=0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 0.1mA, I_B=0	50			V
Collector cut-off current	I_{CBO}	V_{CB}=60V, I_E=0			0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=50V, I_B=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V, I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}= 6V, I_C= 2mA	200		400	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=100mA, I_B= 10mA			0.25	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C=100mA, I_B= 10mA			1	V
Transition frequency	f_T	V_{CE}=10V, I_C= 1mA, f=30MHz	80			MHz

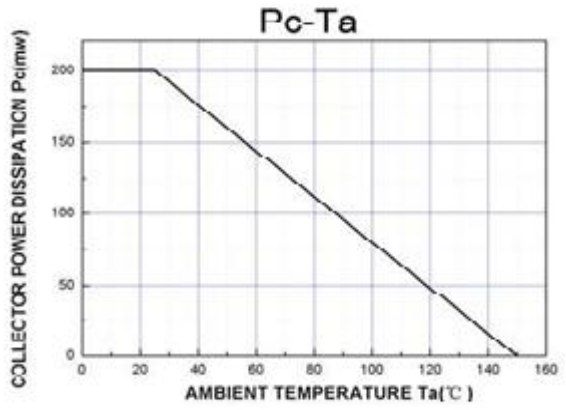
Typical Characteristics











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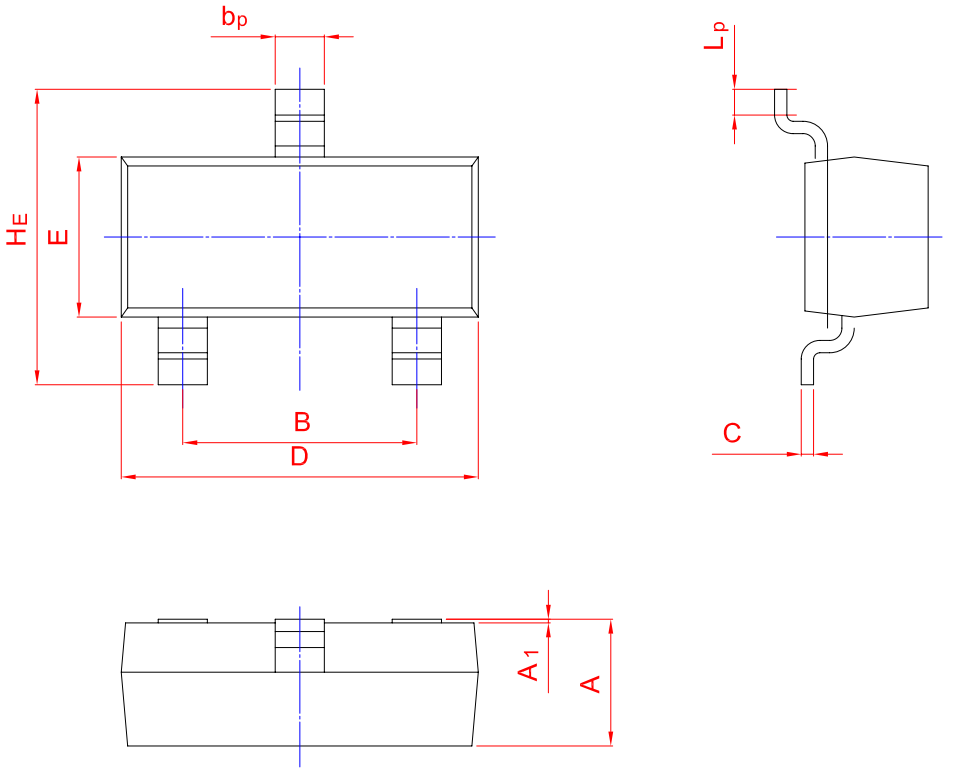
PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-23**



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20