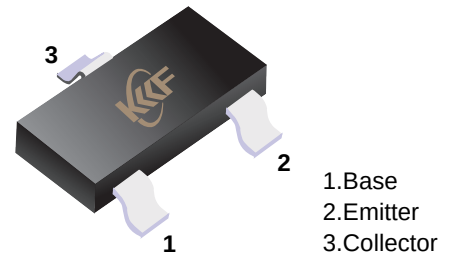


2SC1815

■ NPN Transistors

■ Features

- Power dissipation



■ Simplified outline(SOT-23)

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V _{CB0}	60	V
Collector to Emitter Voltage	V _{CEO}	50	V
Emitter to Base Voltage	V _{EB0}	5	V
Collector Current to Continuous	I _c	150	mA
Collector Power Dissipation	P _c	200	mW
Junction Temperature	T _j	125	℃
Storage Temperature	T _{stg}	-55 to 125	℃

■ Electrical Characteristics Ta = 25℃

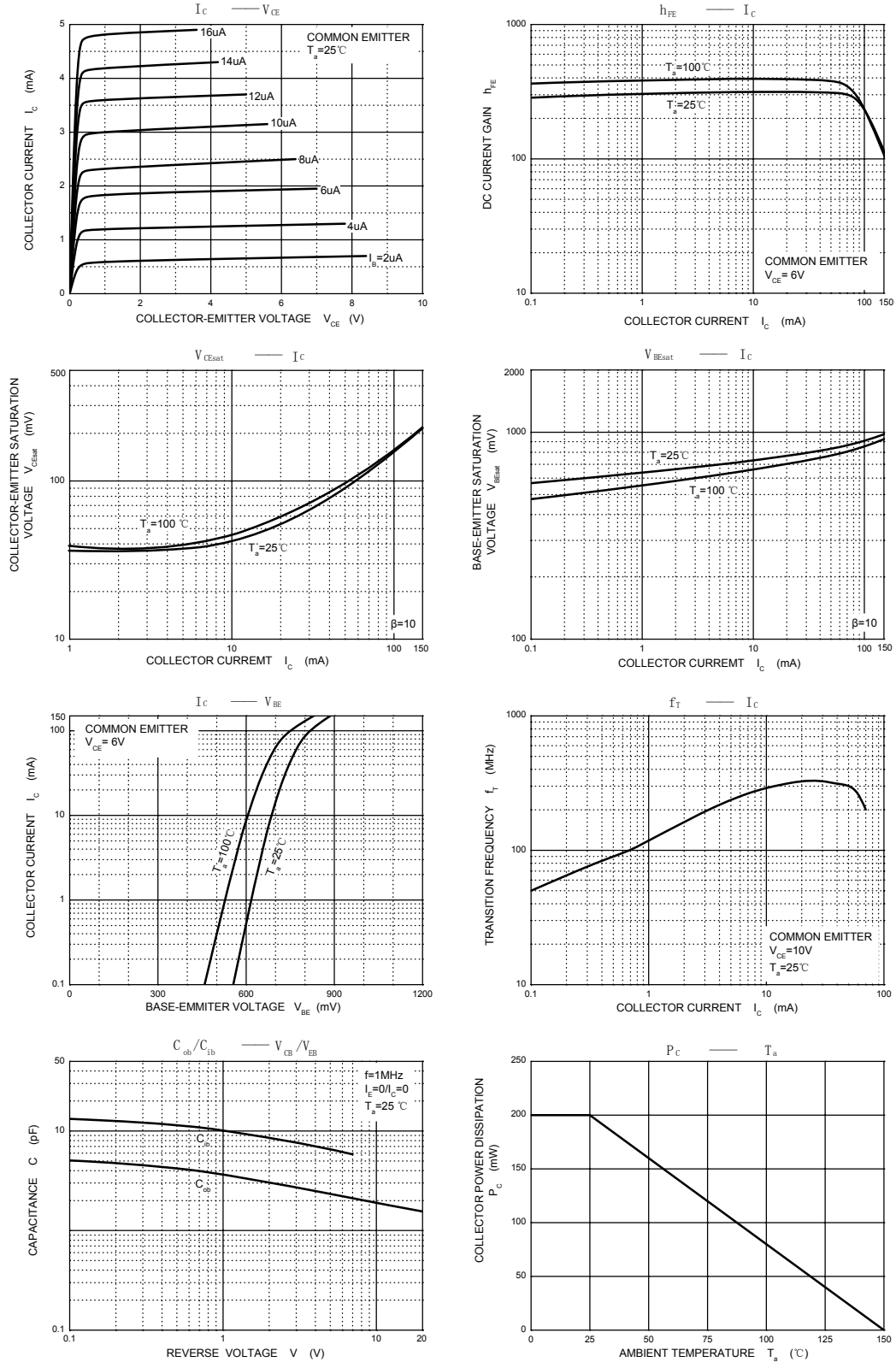
Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	V _{CB0}	I _c = 100 μ A, I _E =0	60			V
Collector to emitter breakdown voltage	V _{CEO}	I _c = 0.1mA, I _B =0	50			V
Collector cut to off current	I _{CB0}	V _{CB} =60V, I _E =0			0.1	μ A
Collector cut to off current	I _{CEO}	V _{CE} =40V, I _B =0			1	μ A
Emitter cut to off current	I _{EB0}	V _{EB} = 5V, I _c =0			0.1	μ A
DC current gain	h _{FE}	V _{CE} = 6V, I _c = 2mA	130		400	
Collector to emitter saturation voltage	V _{CE(sat)}	I _c =100 mA, I _B = 10mA			0.25	V
Base to emitter saturation voltage	V _{BE(sat)}	I _c =100 mA, I _B = 10mA			1	V
Transition frequency	f _T	V _{CE} =10V, I _c = 1mA, f=30MHz	80			MHz

■ hFE Classification

Type	2SC1815-L	2SC1815-H
Range	130-200	200-400
Marking	HFL	HF

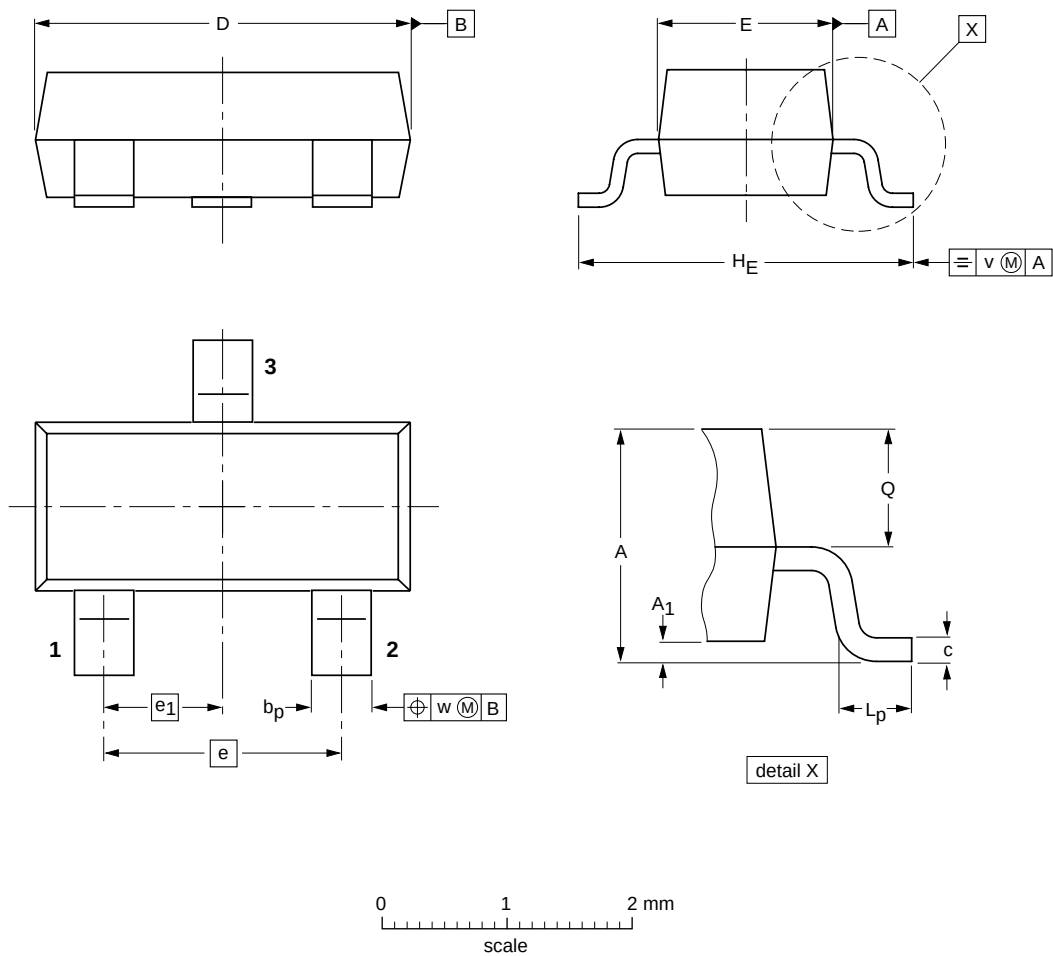
2SC1815

Typical Characteristics



2SC1815

■ SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1