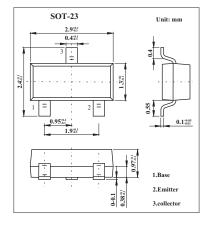
SMD Type Transistors

# NPN Transistor 2SC1815

#### Features

Power dissipation



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit	
Collector to Base Voltage	Vсво	60	V	
Collector to Emitter Voltage	VCEO	50	V	
Emitter to Base Voltage	VEBO	5	V	
Collector Current to Continuous	Ic	150	mA	
Collector Power Dissipation	Pc	200	mW	
Junction Temperature	Tj	<b>125</b> ℃		
Storage Temperature	Tstg	-55 to 125	$^{\circ}$	

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Тур	Max	Unit
Collector to base breakdown voltage	Vсво	Ic= 100 μ A, IE=0	60			V
Collector to emitter breakdown voltage	VCEO	Ic= 0.1mA, Iв=0	50			V
Collector cut to off current	Ісво	Vcb=60V, IE=0			0.1	μ <b>Α</b>
Collector cut to off current	ICEO	VCE=50V, IB=0			0.1	μ <b>Α</b>
Emitter cut to off current	ІЕВО	VEB= 5V, IC=0			0.1	μ <b>Α</b>
DC current gain	hFE	VcE= 6V, Ic= 2mA	130		400	
Collector to emitter saturation voltage	VCE(sat)	Ic=100 mA, Iв= 10mA			0.25	V
Base to emitter saturation voltage	VBE(sat)	Ic=100 mA, Iв= 10mA			1	V
Transition frequency	fτ	VcE=10V, Ic= 1mA,f=30MHz	80			MHz

## ■ hFE Classification

Marking	HF		
Rank	L	Н	
hFE	130~200	200~400	

SMD Type Transistors

# 2SC1815

#### ■ Typical Characteristics

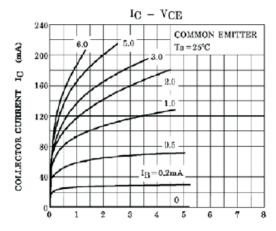


Fig.1 Collector Emitter Voltage

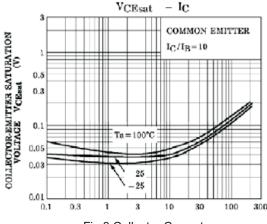


Fig.3 Collector Current

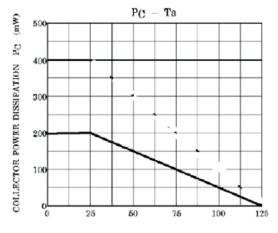


Fig.5 Ambient Temperature

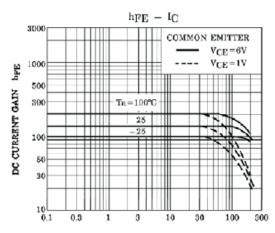


Fig.2 Collector Current

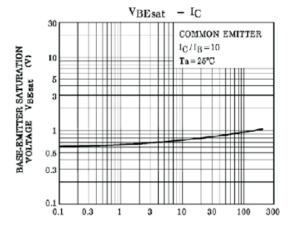


Fig.4Collector Current

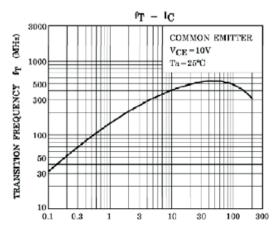


Fig.6 Emitter Current