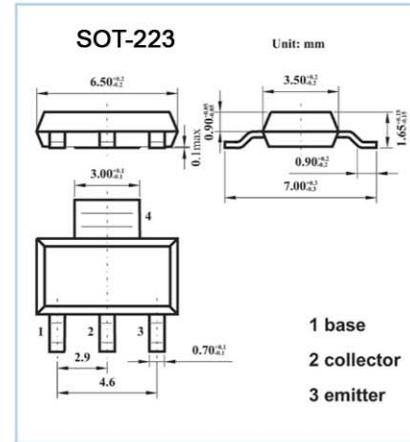


### ■ Features

- High current.
- Three current gain selections.
- 1.4 W total power dissipation.



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CBO</sub>	-32	V
Collector-emitter voltage	V <sub>CEO</sub>	-20	V
Emitter-base voltage	V <sub>EBO</sub>	-5	V
Collector current (DC)	I <sub>C</sub>	-1	A
Peak collector current	I <sub>CM</sub>	-2	A
Peak base current	I <sub>BM</sub>	-200	mA
Total power dissipation			
* 1	P <sub>tot</sub>	0.625	W
* 2		1	W
* 3		1.4	W
Storage temperature	T <sub>stg</sub>	-65 to +150	°C
Junction temperature	T <sub>j</sub>	150	°C
Operating ambient temperature	T <sub>amb</sub>	-65 to +150	°C
Thermal resistance from junction to ambient *			
* 1	R <sub>th(j-a)</sub>	200	K/W
* 2		125	K/W
* 3		89	K/W
Thermal resistance from junction to solder point	R <sub>th(j-s)</sub>	15	K/W

\*1 Device mounted on a FR4 PCB; single-sided copper; tinplated; standard footprint for SOT223.

\*2 Device mounted on a FR4 PCB; single-sided copper; tinplated; 1 cm<sup>2</sup> collector mounting pad.

\*3 Device mounted on a FR4 PCB; single-sided copper; tinplated; 6 cm<sup>2</sup> collector mounting pad.

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	ICBO	I <sub>E</sub> = 0 A; V <sub>CB</sub> = -25 V			-100	nA
		I <sub>E</sub> = 0 A; V <sub>CB</sub> = -25 V; T <sub>j</sub> = 150 °C			-10	μA
Emitter cutoff current	IEBO	I <sub>C</sub> = 0 A; V <sub>EB</sub> = -5 V			-100	nA
DC current gain BCP69	h <sub>FE</sub>	V <sub>CE</sub> = -10 V; I <sub>c</sub> = -5 mA	50			
		V <sub>CE</sub> = -1 V; I <sub>c</sub> = -500 mA	85		375	
		V <sub>CE</sub> = -1 V; I <sub>c</sub> = -1 A	60			
	BCP69-16		100		250	
		V <sub>CE</sub> = -1 V; I <sub>c</sub> = -500 mA	140		230	
			160		375	
Collector-emitter saturation voltage	V <sub>CESAT</sub>	I <sub>c</sub> = -1 A; I <sub>b</sub> = -100 mA;			-500	mV
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = -10 V; I <sub>c</sub> = -5 mA			-700	mV
		V <sub>CE</sub> = -1 V; I <sub>c</sub> = -1 A			-1	V
Collector capacitance	C <sub>c</sub>	I <sub>E</sub> = i <sub>e</sub> = 0 A; V <sub>CB</sub> = -10 V; f = 1 MHz		28		pF
Transition frequency	f <sub>T</sub>	I <sub>c</sub> = -50 mA; V <sub>CE</sub> = -5 V; f = 100 MHz	40	140		MHz

单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)