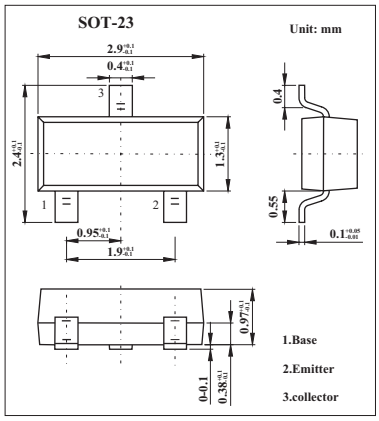
Silicon NPN Epitaxial

2SC2859



■ Features

● Excellent hFE linearity : hFE (2) = 25 (min) (VCE = 6 V, IC = 400 mA).

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	VCBO	35	V
Collector-emitter voltage	VCEO	30	V
Emitter-base voltage	VEBO	5	V
Collector current	IC	500	mA
Base current	IB	50	mA
Collector power dissipation	PC	150	mW
Junction temperature	Tj	125	℃
Storage temperature range	Tstg	-55 to +125	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	ICBO	VCB = 35 V, IE = 0			0.1	μA
Emitter cut-off current	IEBO	VEB = 5 V, IC = 0			0.1	μA
DC current gain	hFE1	VCE = 1V , IC = 100mA	70		400	
	hFE2 *	VCE = 6V , IC = 400mA	25			
Collector-emitter saturation voltage	VCE (sat)	IC = 100 mA, IB = 10 mA		0.1	0.25	V
Base-emitter voltage	VBE	VCE = 1V, IC = 100 mA		0.8	1.0	V
Transition frequency	fT	VCE = 6V, IC = 20 mA		300		MHz
Collector output capacitance	Cob	VCB = 6V, IE = 0 , f = 1 MHz		7		pF

* hFE 2 classification O: 25 min, Y: 40 min, GR: 70 min

■ hFE Classification

Marking	WO	WY	WG
hFE	70～140	120～240	200～400