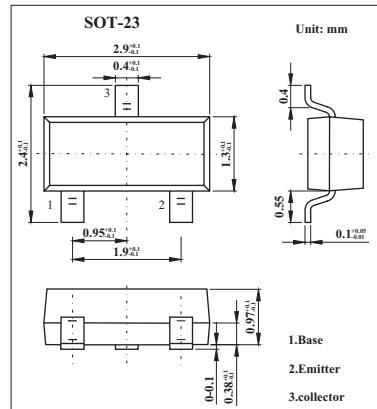


# 2SC2859

## ■ Features

- Excellent hFE linearity :  $hFE(2) = 25$  (min) ( $V_{CE} = 6$  V,  $I_C = 400$  mA).



## ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	35	V
Collector-emitter voltage	$V_{CEO}$	30	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	500	mA
Base current	$I_B$	50	mA
Collector power dissipation	$P_C$	150	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to +125	$^\circ\text{C}$

## ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB} = 35$ V, $I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5$ V, $I_C = 0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE1}$	$V_{CE} = 1$ V, $I_C = 100$ mA	70		400	
	$h_{FE2}$ *	$V_{CE} = 6$ V, $I_C = 400$ mA	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100$ mA, $I_B = 10$ mA		0.1	0.25	V
Base-emitter voltage	$V_{BE}$	$V_{CE} = 1$ V, $I_C = 100$ mA		0.8	1.0	V
Transition frequency	$f_T$	$V_{CE} = 6$ V, $I_C = 20$ mA		300		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 6$ V, $I_E = 0$ , $f = 1$ 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