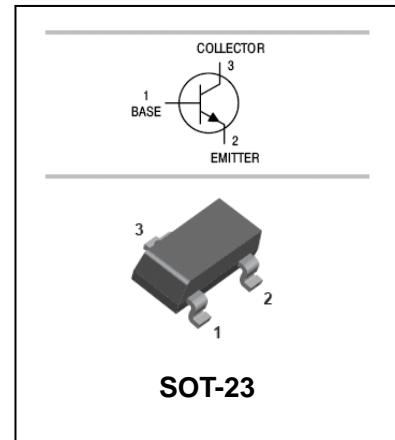


## Silicon Epitaxial Planar Transistor

## 2SC2859

### FEATURES

- Power dissipation:  $P_C=150\text{mW}$ .
- Excellent  $h_{FE}$  linearity: $h_{FE(2)}=25$   
( $V_{CE}=6\text{V}, I_C=400\text{mA}$ ).
- Complementary to 2SA1182.



### APPLICATIONS

- Audio frequency general purpose amplifier applications.

### ORDERING INFORMATION

Type No.	Marking	Package Code
2SC2859	WOWY/WG	SOT-23

### MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	35	V
$V_{CEO}$	Collector-Emitter Voltage	30	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	500	mA
$P_C$	Collector Dissipation	150	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +125	$^\circ\text{C}$

Silicon Epitaxial Planar Transistor

**2SC2859**

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=35V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=1V, I_C=100mA$ $V_{CE}=6V, I_C=400mA$	70 25		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$		0.1	0.25	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=1V, I_C=100mA$		0.8	1.0	V
Collector output capacitance	$C_{ob}$	$V_{CB}=6V, I_E=0, f=1MHz$		7		pF
Transition frequency	$f_T$	$V_{CE}=6V, I_C=20mA$		300		MHz

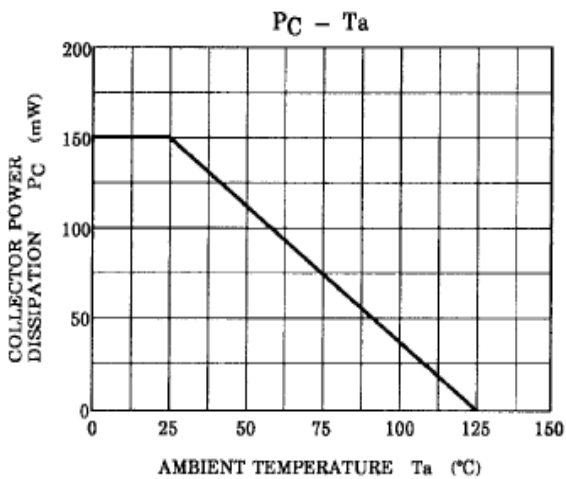
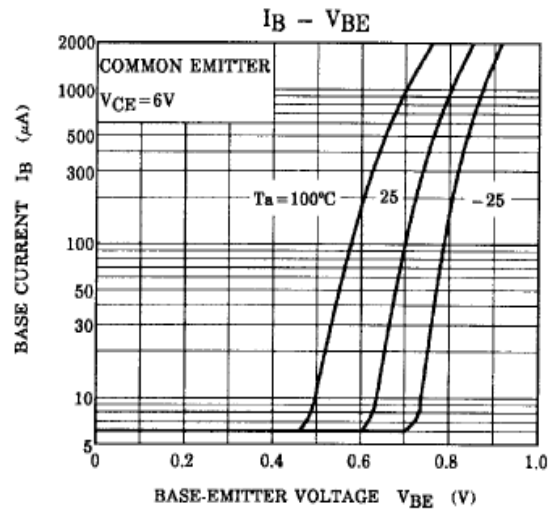
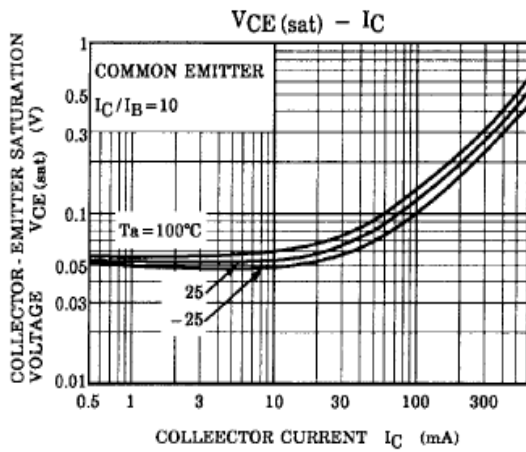
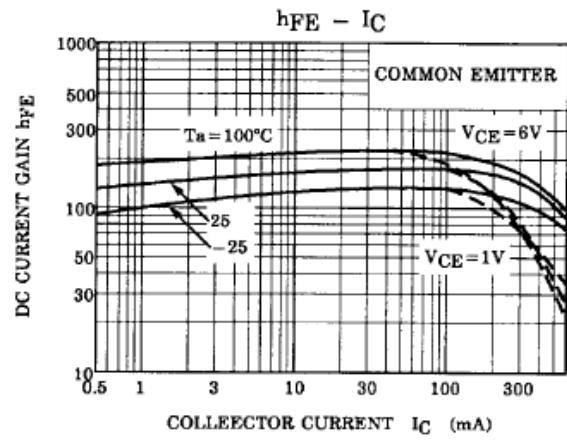
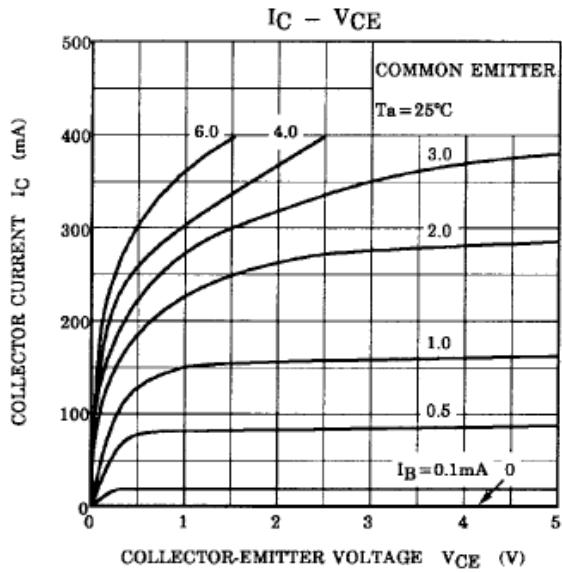
CLASSIFICATION OF  $h_{FE(1)}$

Rank	O	Y	G
Range	70-140	120-240	200-400

Silicon Epitaxial Planar Transistor

**2SC2859**

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified



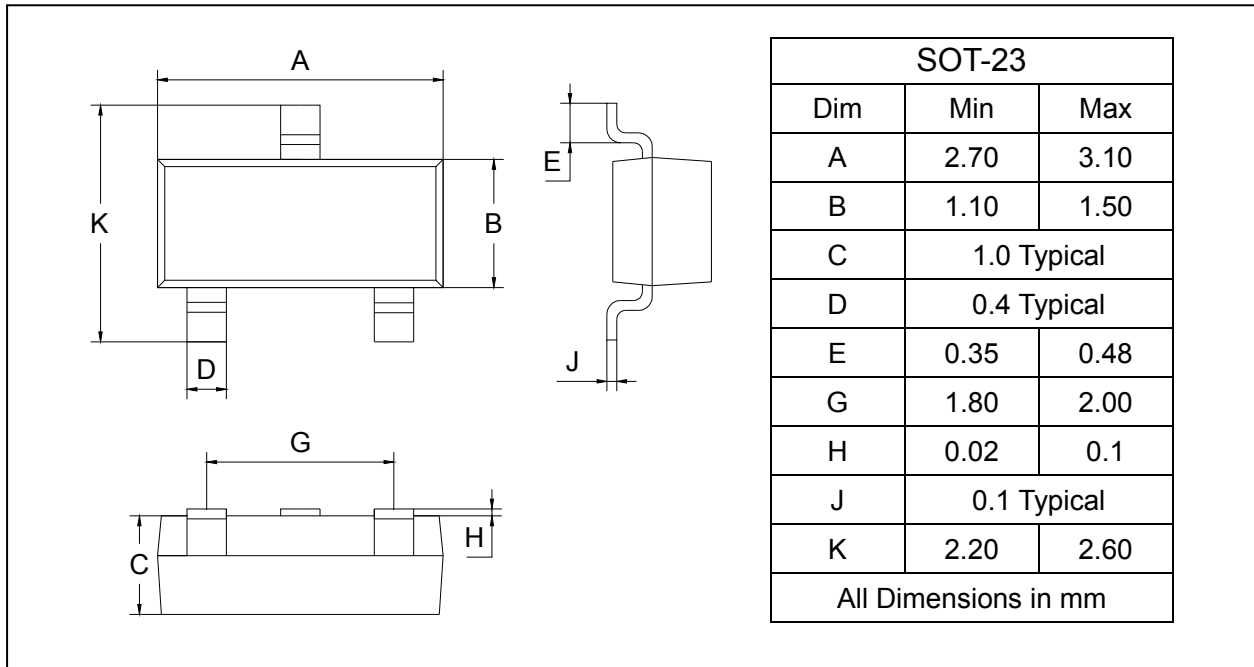
## Silicon Epitaxial Planar Transistor

## 2SC2859

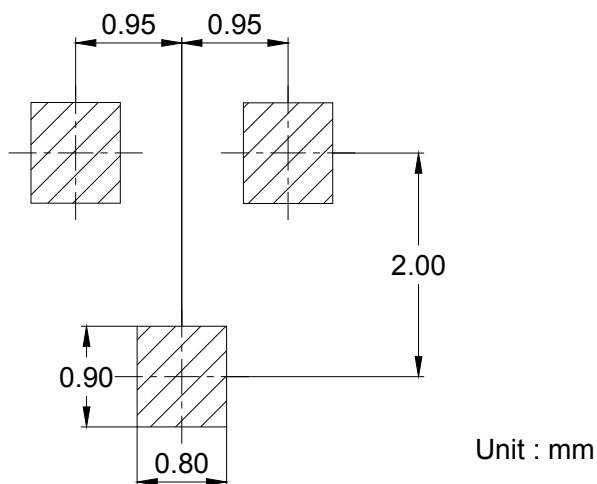
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
2SC2859	SOT-23	3000/Tape&Reel