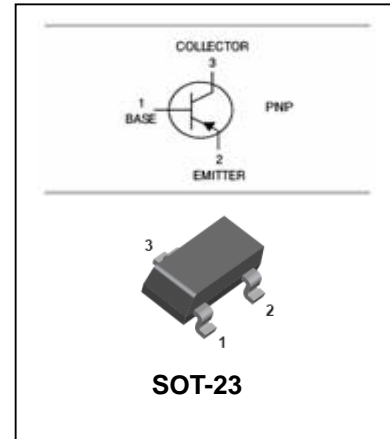


## Silicon Epitaxial Planar Transistor

## 2SA1179

### FEATURES

- High forward current transfer ratio  $h_{FE}$  which has satisfactory linearity.
- High speed switching.
- Complementary to 2SD1749.



### APPLICATIONS

- For power application and switching.

### ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1179	M	SOT-23

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-55	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-150	mA
$P_C$	Collector Dissipation	200	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55~150	$^\circ\text{C}$

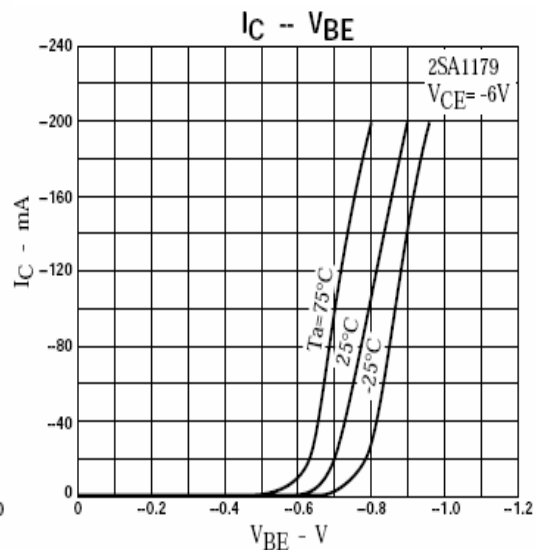
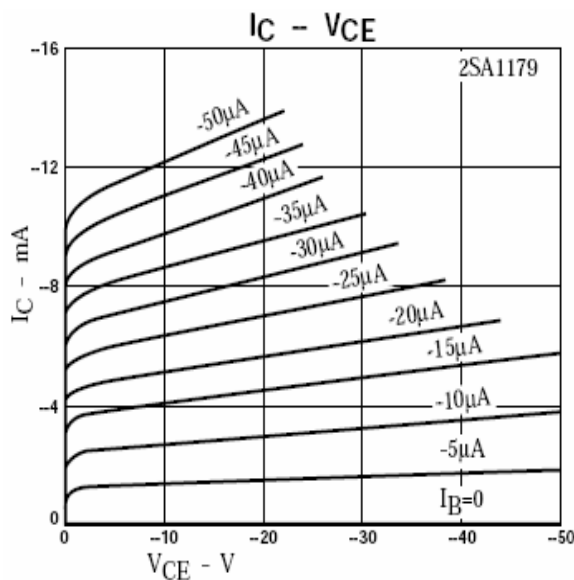
## Silicon Epitaxial Planar Transistor

## 2SA1179

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

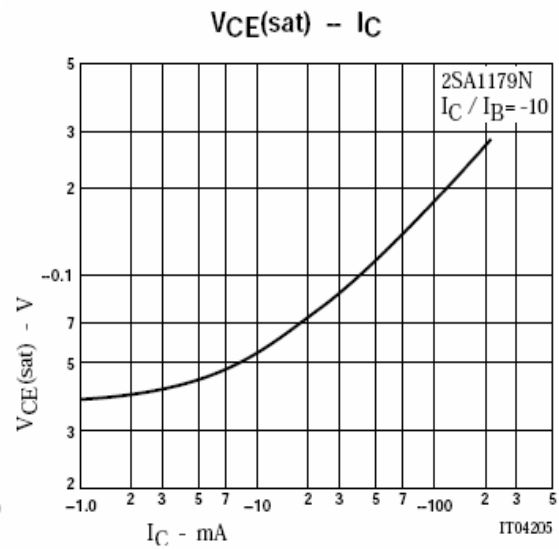
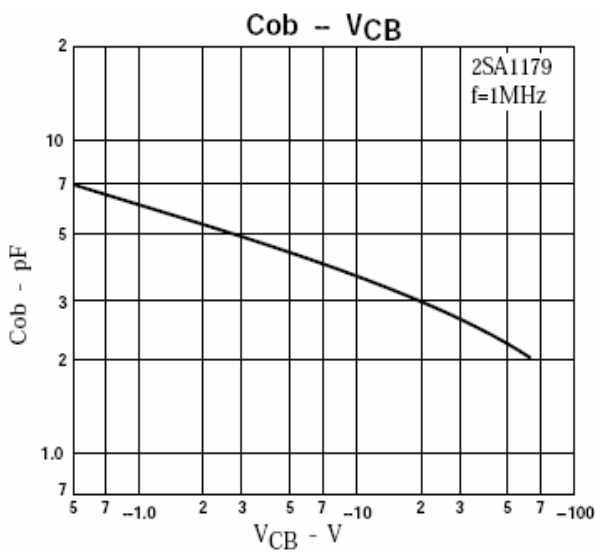
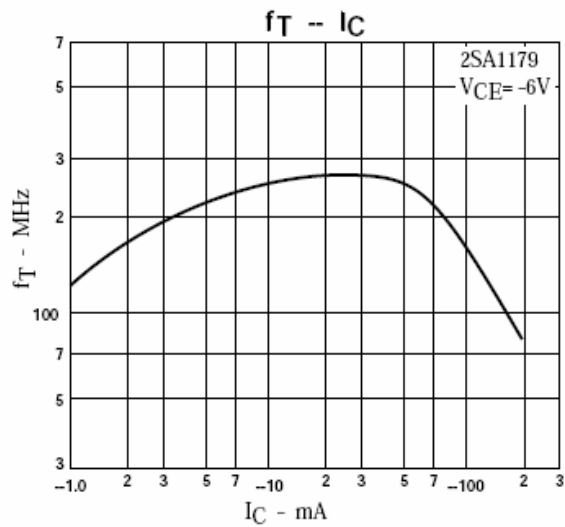
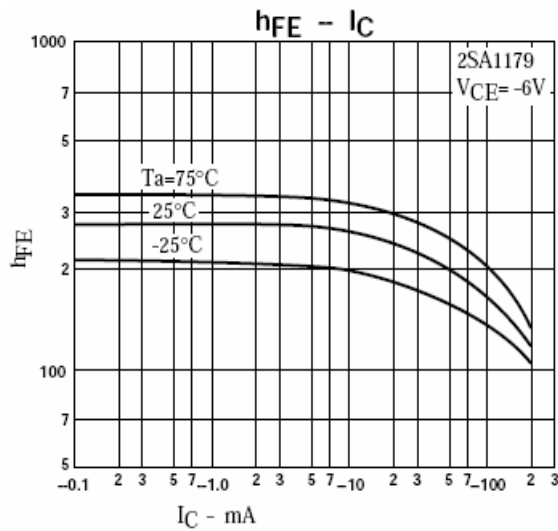
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-55			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -35V, I_E = 0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4V, I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -6V, I_C = -1mA$	200		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50mA, I_B = -5mA$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50mA, I_B = -5mA$			-1.0	V
Transition frequency	$f_T$	$V_{CE} = -6V, I_C = -10mA$		180		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -6V, I_E = 0, f = 1MHz$		4		pF

### TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



## Silicon Epitaxial Planar Transistor

## 2SA1179



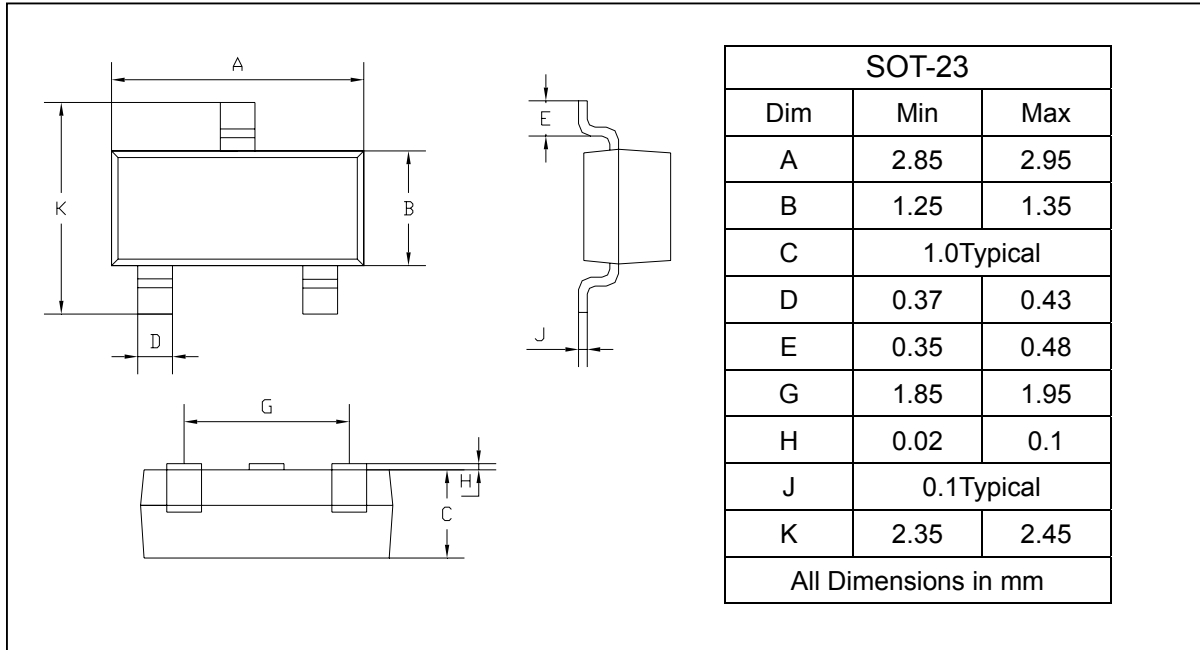
## Silicon Epitaxial Planar Transistor

## 2SA1179

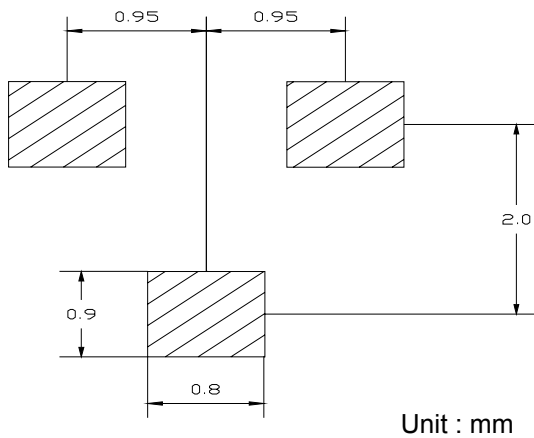
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
2SA1179	SOT-23	3000/Tape&Reel