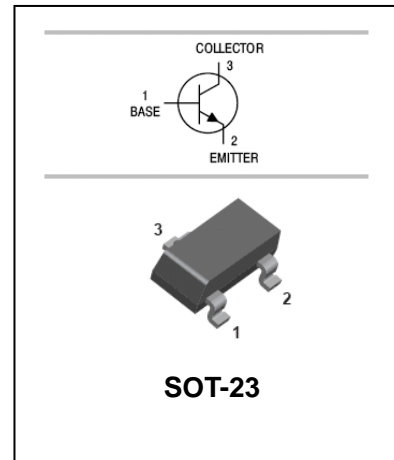


## Silicon Epitaxial Planar Transistor

## 2SD602A

### FEATURES

- Complementary to 2SB710A PNP Transistor.
- Low collector to emitter saturation voltage  $V_{CE(sat)}$ .



### APPLICATIONS

- General purpose amplifier applications.

### ORDERING INFORMATION

Type No.	Marking	Package Code
2SD602A	XQ/XR/XS	SOT-23

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	50	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current	500	mA
$I_{CP}$	Peak collector current	1	A
$P_C$	Collector power Dissipation	200	mW
$T_j, T_{stg}$	Junction and Storage Temperature	-55~150	$^\circ\text{C}$

**Silicon Epitaxial Planar Transistor****2SD602A****ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=20V, I_E=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=10V, I_C=150mA$ $V_{CE}=-10V, I_C=500mA$	85 40		340	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=300mA, I_B=30mA$		0.35	0.6	V
Transition frequency	$f_T$	$V_{CB}=10V, I_E=-50mA,$ $f=200MHz$		200		MHz
Output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$		6	15	pF

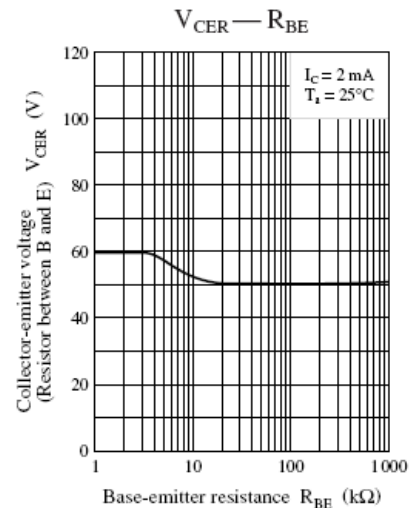
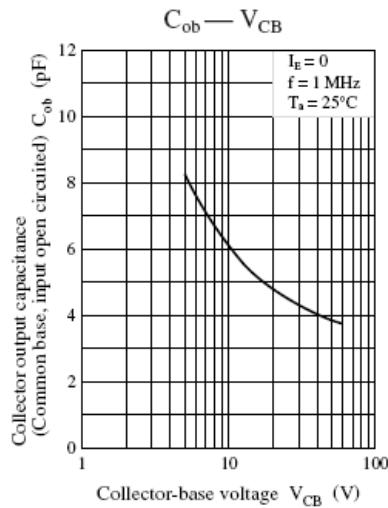
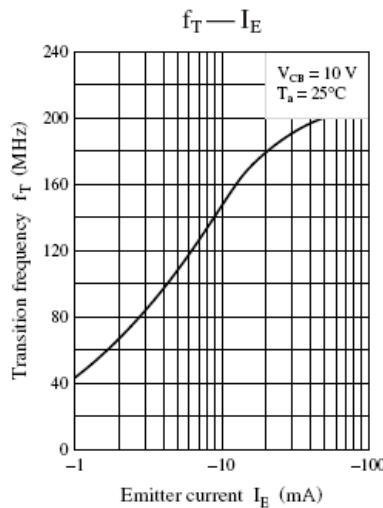
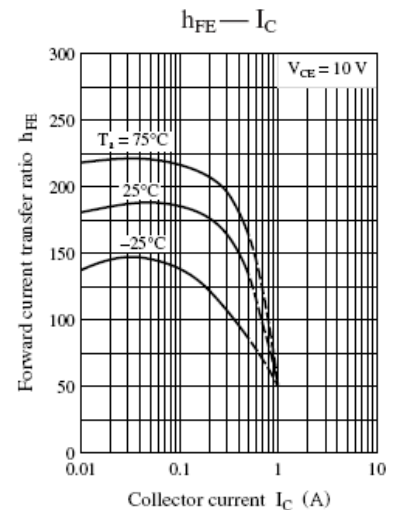
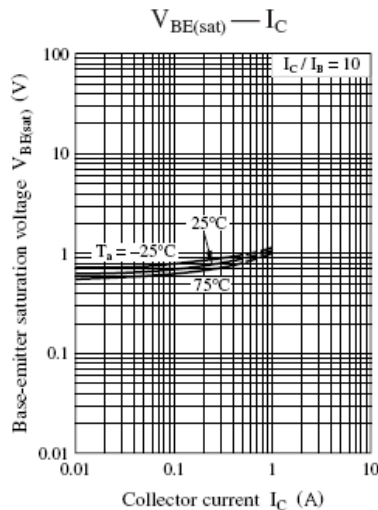
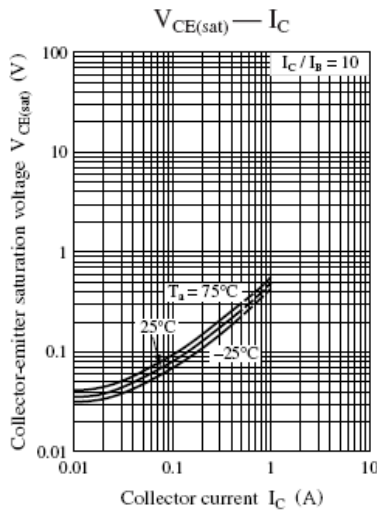
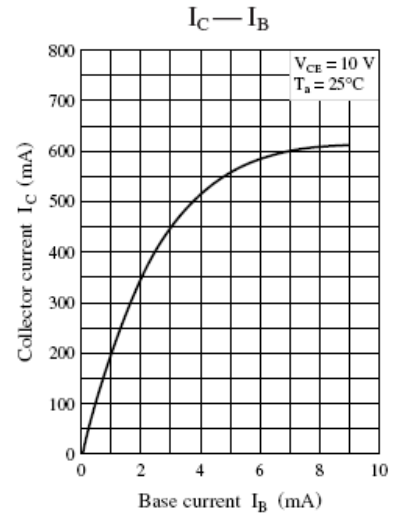
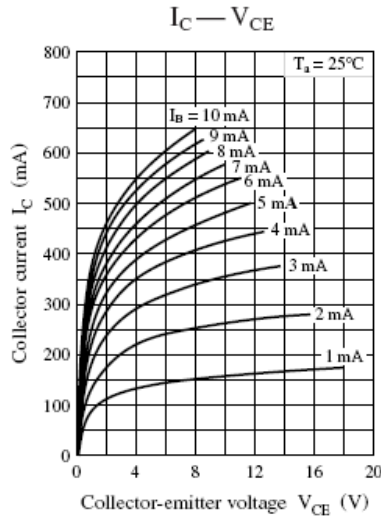
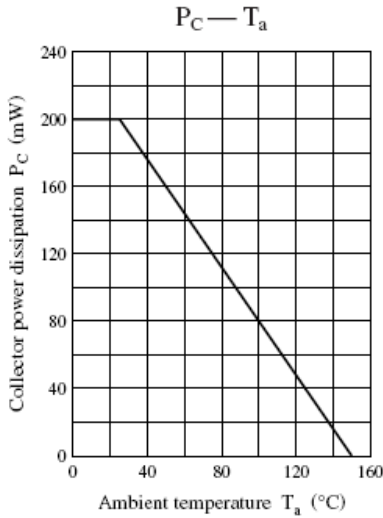
**CLASSIFICATION OF  $h_{FE(1)}$** 

Rank	Q	R	S
$h_{FE1}$	85-170	120-240	170-340
Marking	XQ	XR	XS

## Silicon Epitaxial Planar Transistor

## 2SD602A

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



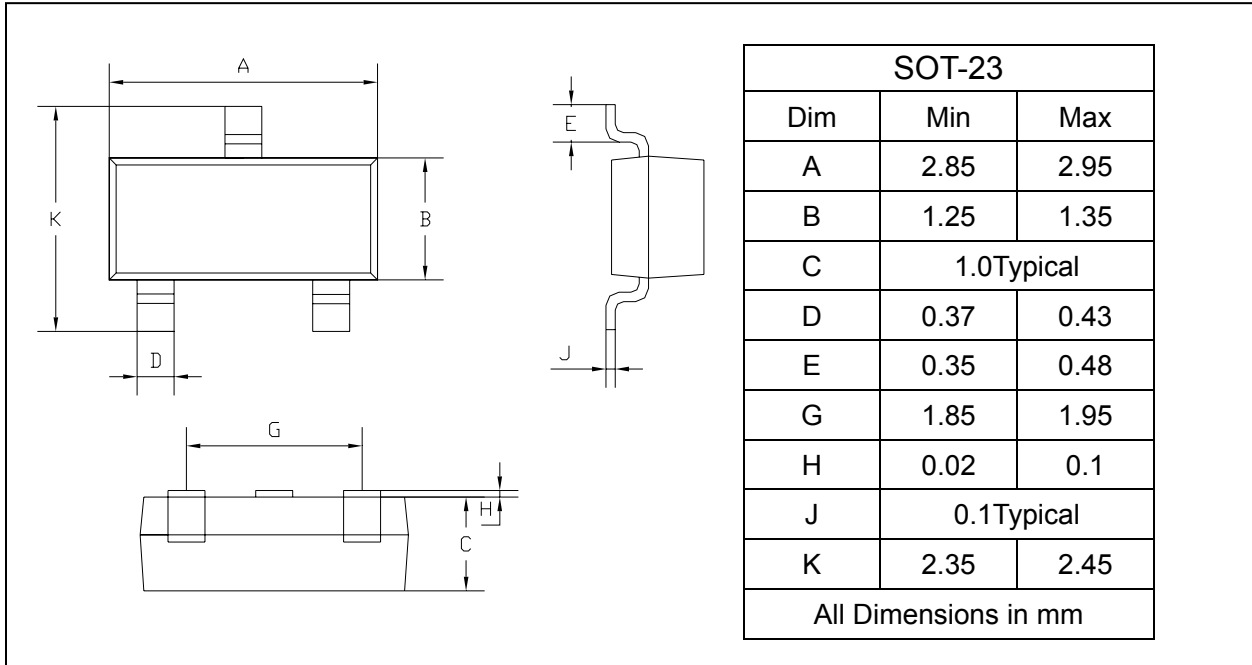
## Silicon Epitaxial Planar Transistor

## 2SD602A

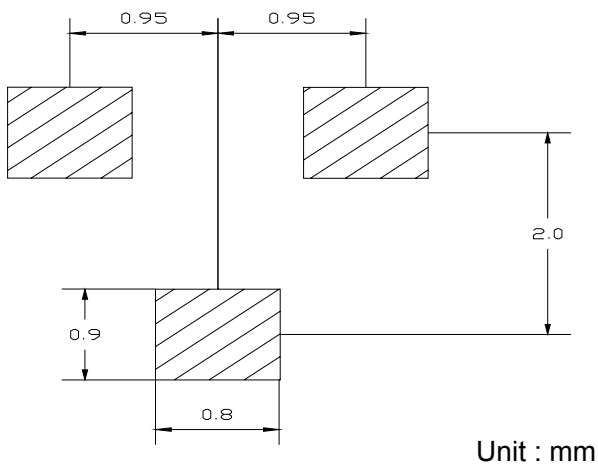
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
2SD602A	SOT-23	3000/Tape&Reel

[www.s-manuals.com](http://www.s-manuals.com)