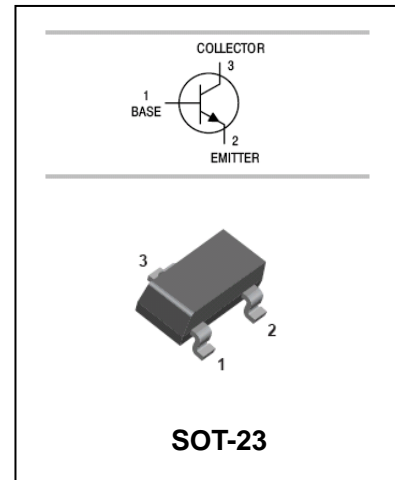


Silicon Epitaxial Planar Transistor

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 to +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	μA
DC current gain	h_{FE}	$V_{CE}=10V, I_C=150mA$ $V_{CE}=10V, I_C=500mA$	85 40	160	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 $h_{FE(1)}$

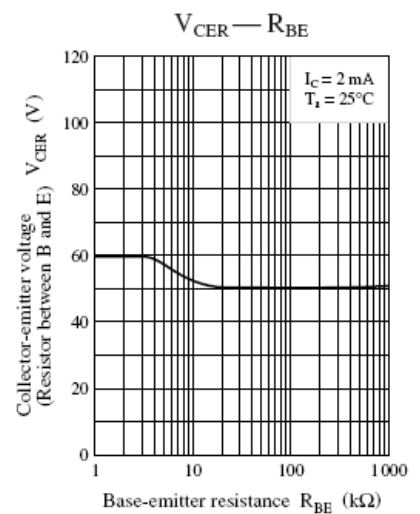
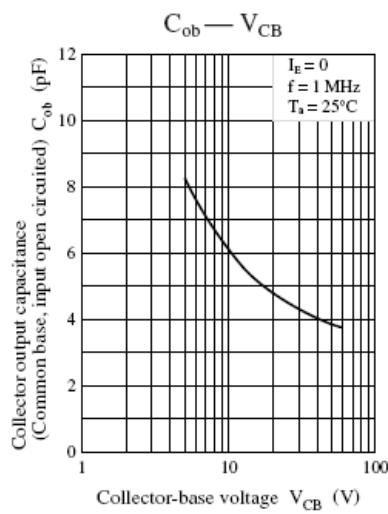
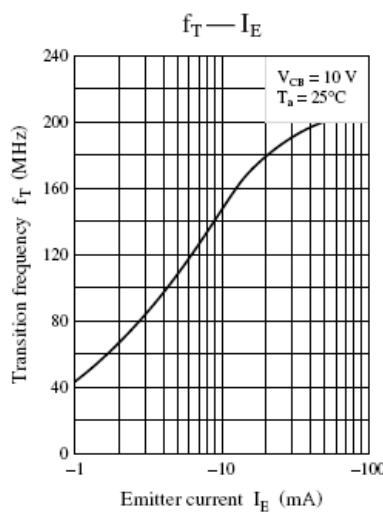
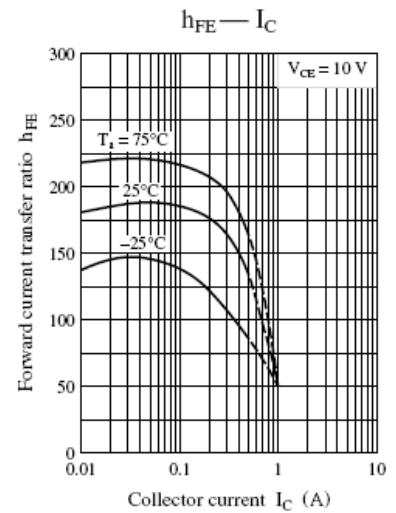
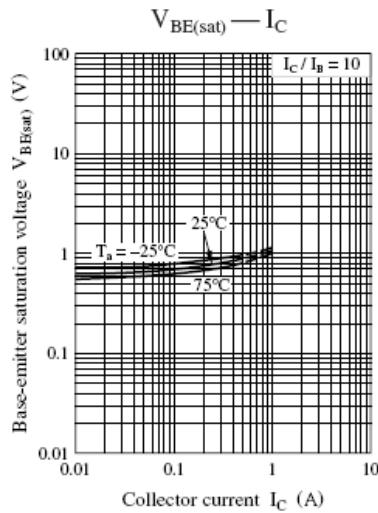
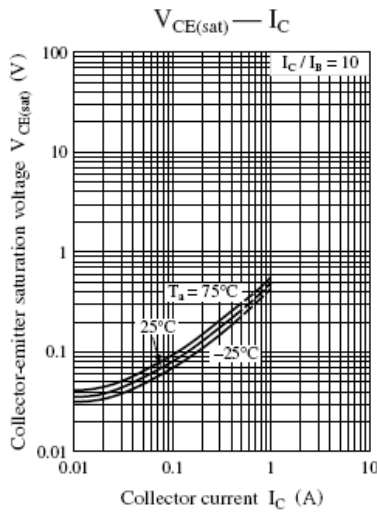
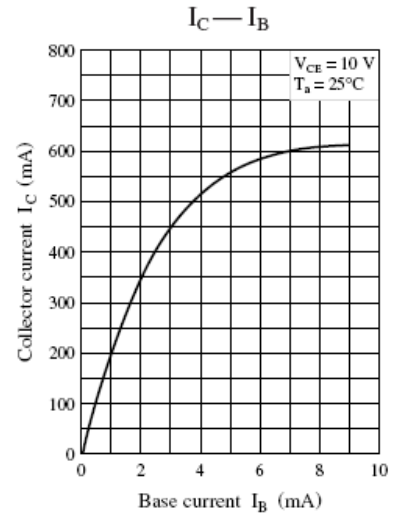
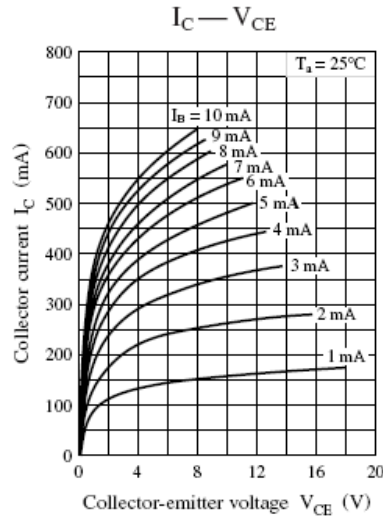
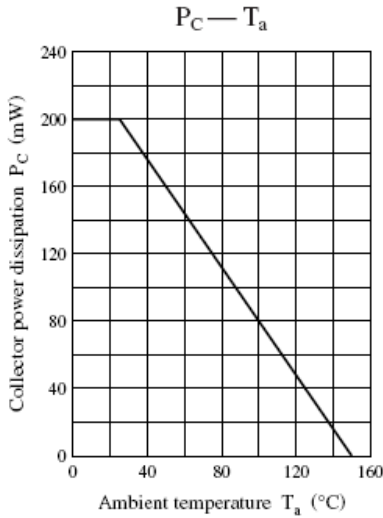
Rank	Q	R	S
h_{FE1}	85-170	120-240	170-340
Marking	XQ	XR	XS



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