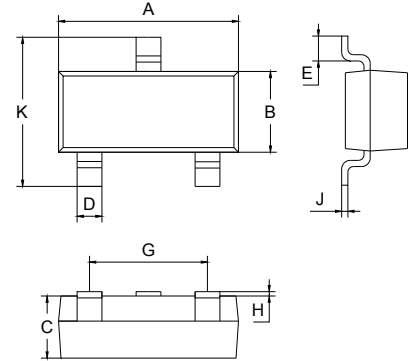
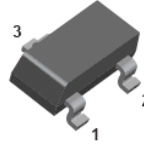


FEATURES

- 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	$^\circ\text{C}$

SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

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

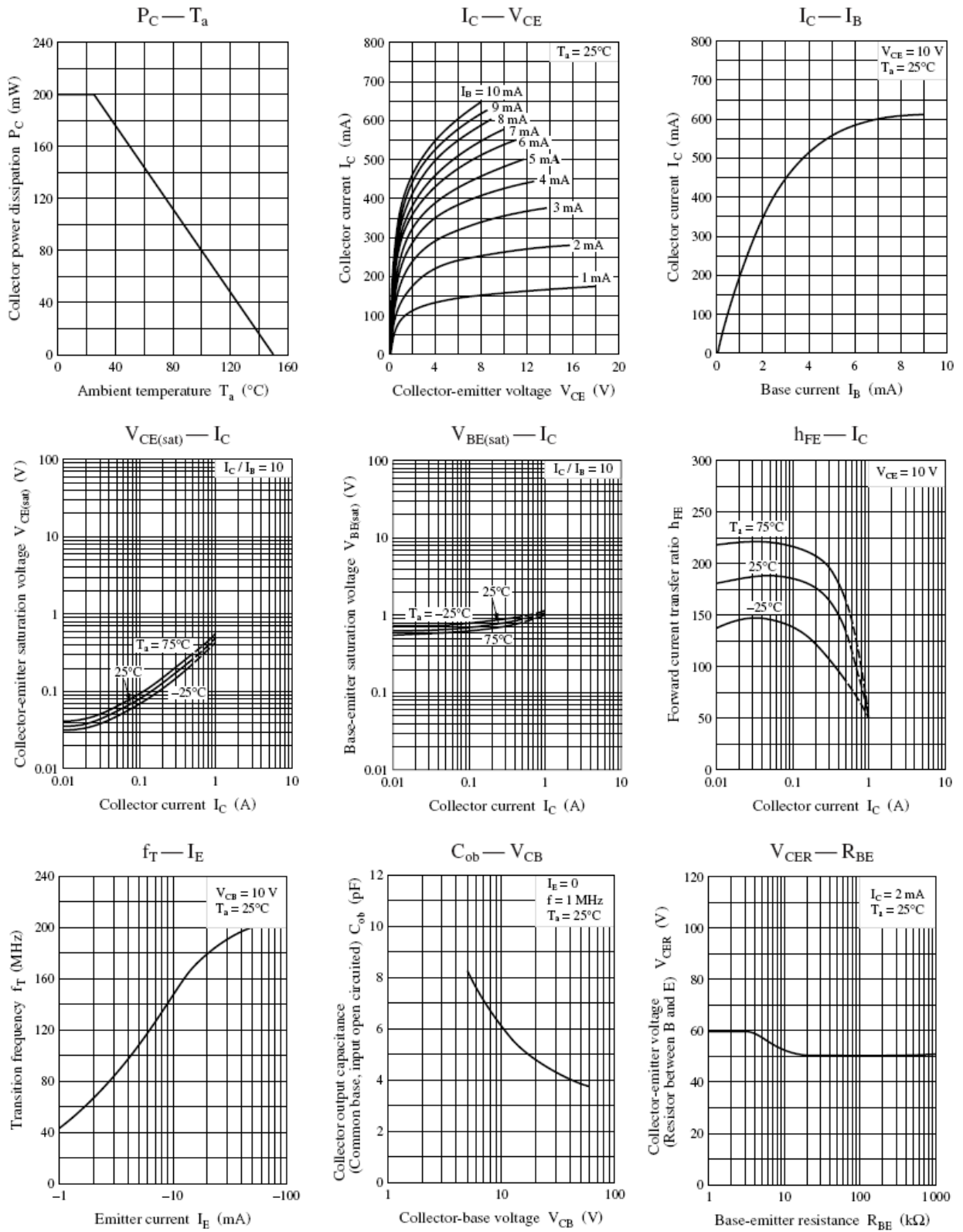
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=20\text{V}, I_E=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=10\text{V}, I_C=150\text{mA}$ $V_{CE}=10\text{V}, I_C=500\text{mA}$	85 40	160	340	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=300\text{mA}, I_B=30\text{mA}$		0.35	0.6	V
Transition frequency	f_T	$V_{CB}=10\text{V}, I_E=-50\text{mA}, f=200\text{MHz}$		200		MHz
Output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		6	15	pF

CLASSIFICATION OF $h_{FE(1)}$

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



TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT-23	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220