

## SOT-23 Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

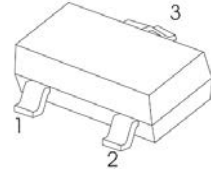
### FEATURES

Complimentary to SS8050N

MARKING: Y2N

### SOT-23

- 1. EMITTER
- 2. BASE
- 3. COLLECTOR



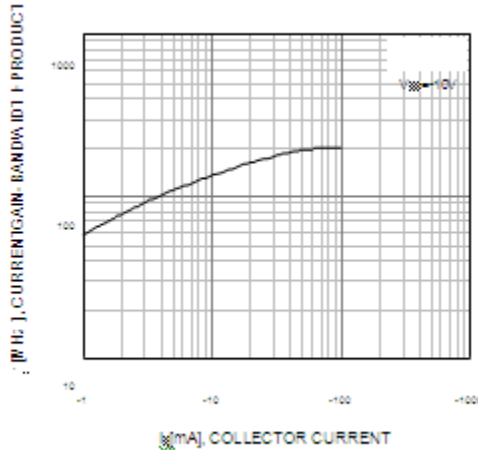
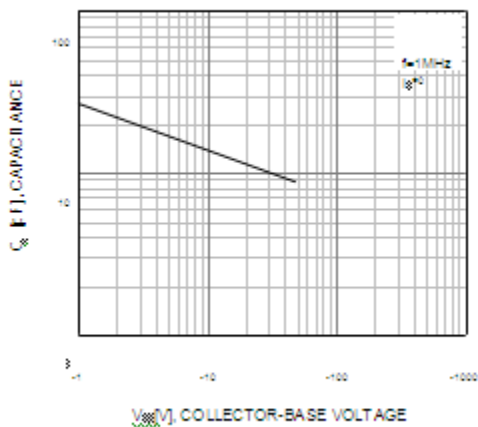
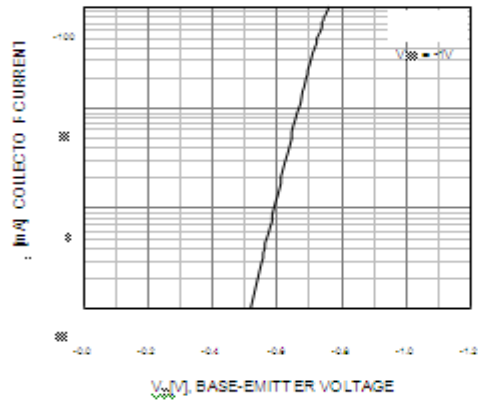
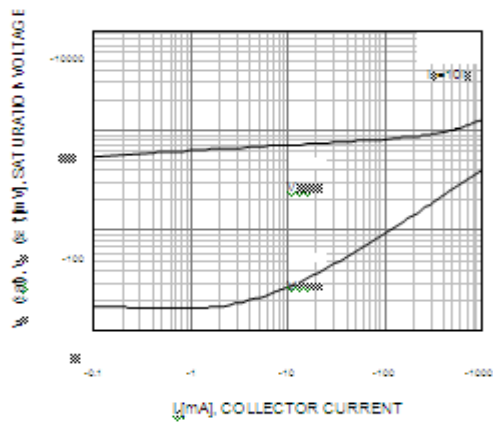
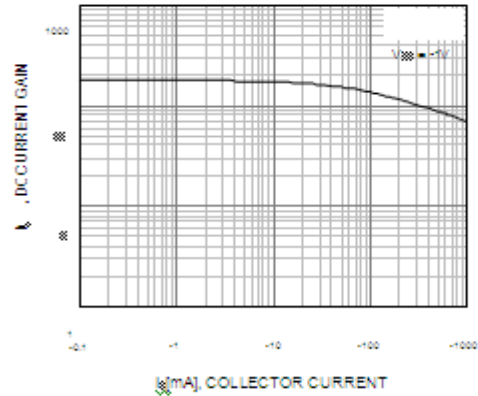
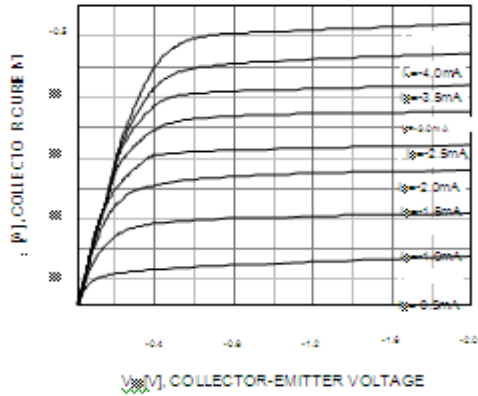
### MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-40	V
$V_{CEO}$	Collector-Emitter Voltage	-25	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-1.5	A
$P_C$	Collector Power Dissipation	0.3	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}$ , $I_E=0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-0.1\text{mA}$ , $I_B=0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}$ , $I_C=0$	-5		V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-40\text{V}$ , $I_E=0$		-0.1	$\mu\text{A}$
Collector cut-off current	$I_{CEO}$	$V_{CE}=-20\text{V}$ , $I_B=0$		-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}$ , $I_C=0$		-0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=-1\text{V}$ , $I_C=-100\text{mA}$	200	350	
	$h_{FE(2)}$	$V_{CE}=-1\text{V}$ , $I_C=-800\text{mA}$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-800\text{mA}$ , $I_B=-80\text{mA}$		-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-800\text{mA}$ , $I_B=-80\text{mA}$		-1.2	V
Base-emitter on voltage	$V_{BE(on)}$	$I_C=-1\text{V}$ , $V_{CE}=-10\text{mA}$		-1	V
Base-emitter positive favor voltage	$V_{BEF}$	$I_B=-1\text{A}$		-1.55	V
Transition frequency	$f_T$	$V_{CE}=-10\text{V}$ , $I_C=-50\text{mA}$ $f=30\text{MHz}$	100		MHz
output capacitance	$C_{ob}$	$(V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz})$		20	pF

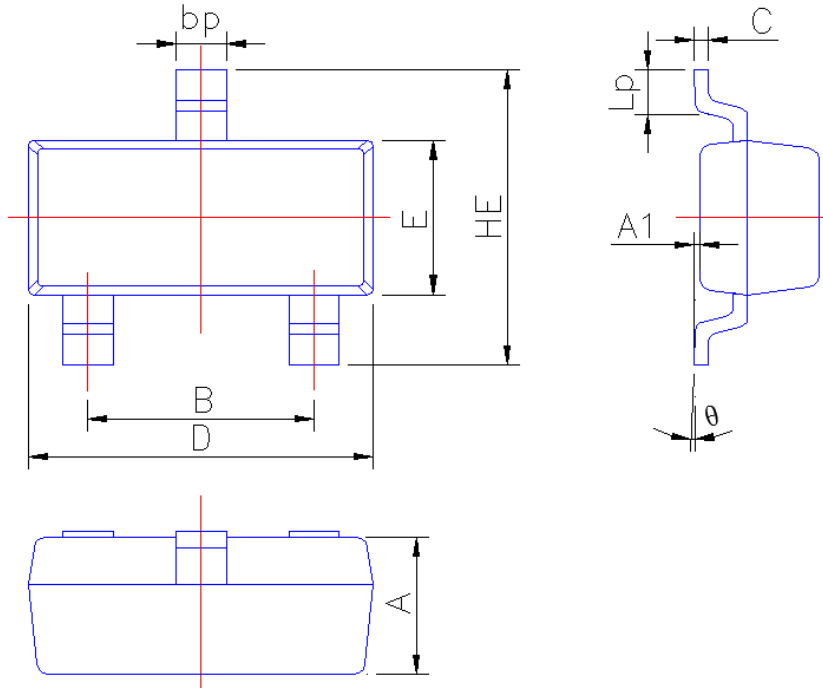
## Typical Characteristics



### PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.10
A1	0.013	0.100
B	1.80	2.00
bp	0.35	0.50
C	0.09	0.150
D	2.80	3.00
E	1.20	1.40
HE	2.20	2.80
Lp	0.20	0.50
theta	0°	5°