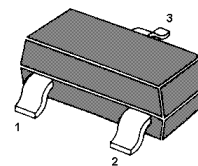


NPN Silicon Epitaxial Planar Transistors

FEATURES

Complimentary to SS8550



1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

MARKING: Y1

Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

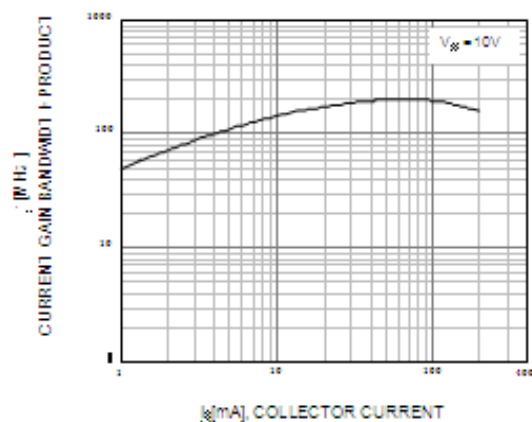
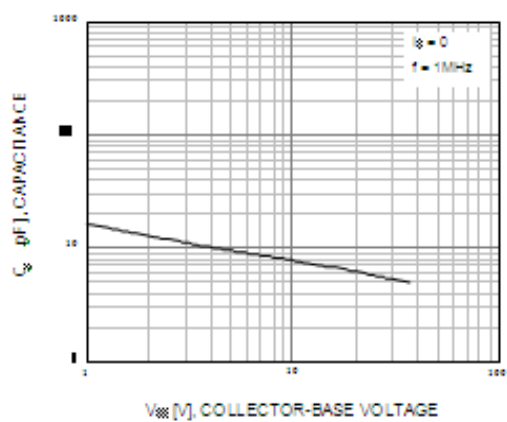
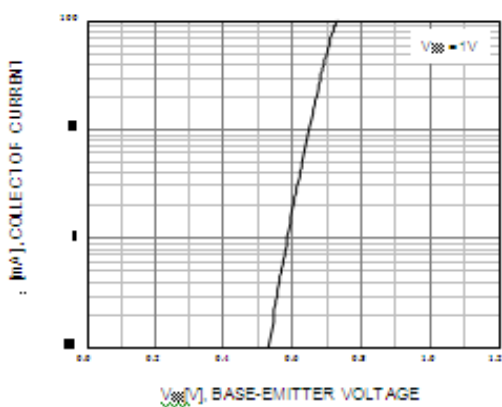
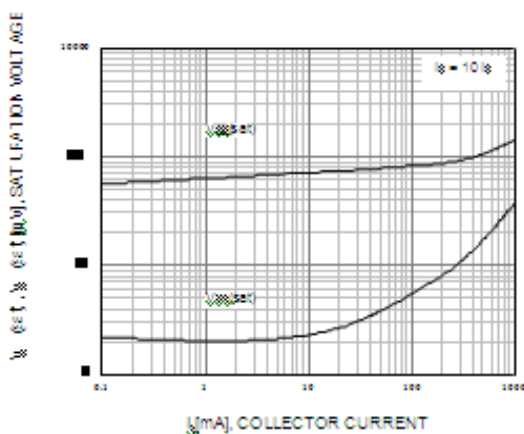
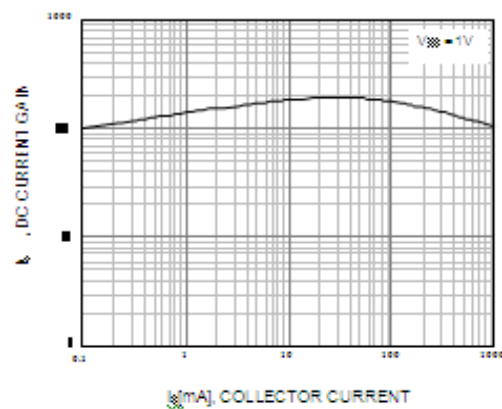
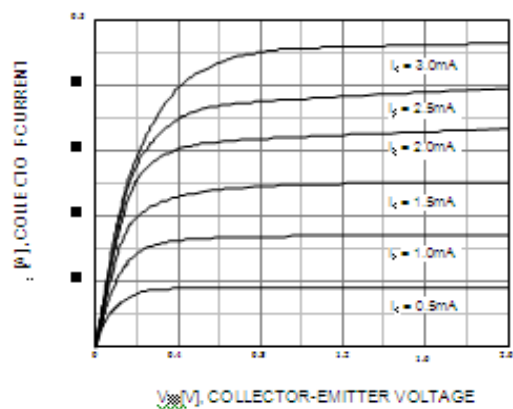
Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	25	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1.5	A
Power Dissipation	P_{tot}	300	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^{\circ}\text{C}$

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Test conditions	MIN	TYP	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	μA
Collector cut-off current	I_{CEO}	$V_{CB} = 20\text{V}$, $I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{V}$, $I_C = 0$			0.1	μA
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
Transition frequency	f_T	$V_{CE} = 10\text{V}$, $I_C = 50\text{mA}$ $f = 30\text{MHz}$	100			MHz



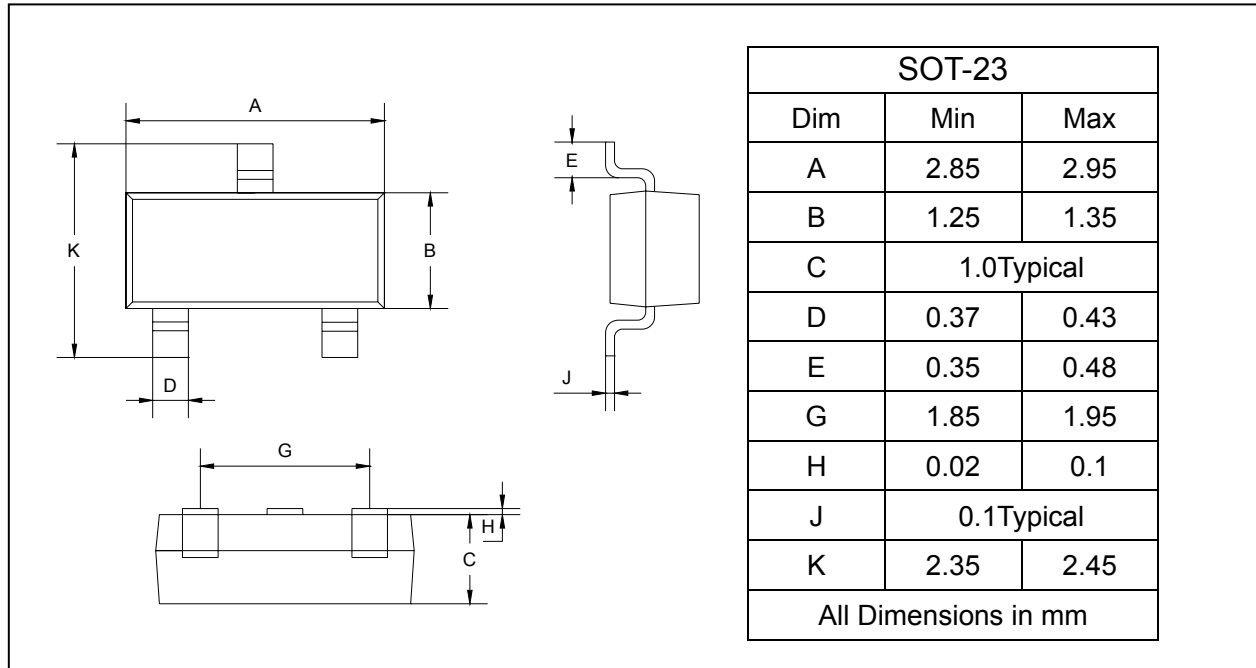
Typical Characteristics



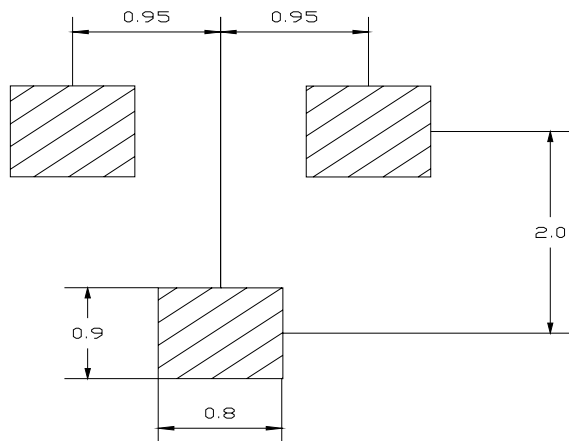
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



Unit : mm

