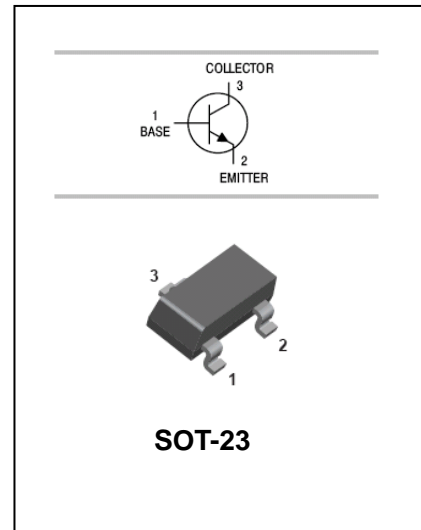


Silicon Epitaxial Planar Transistor

M8050

FEATURES

- High Collector Current.($I_C=800\text{mA}$).
- Complementary To M8550.
- Excellent H_{FE} Linearity.
- High total power dissipation.($P_C=200\text{mW}$)



APPLICATIONS

- High Collector Current.

ORDERING INFORMATION

Type No.	Marking	Package Code
M8050	Y11	SOT-23

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	800	mA
P_C	Collector Dissipation	200	mW
T_j, T_{stg}	Junction and Storage Temperature	-55~150	$^\circ\text{C}$

Silicon Epitaxial Planar Transistor

M8050

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=0.1mA, I_B=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=35V, I_E=0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=20V, I_B=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=1V, I_C=5mA$	45			
		$V_{CE}=1V, I_C=100mA$	80		300	
		$V_{CE}=1V, I_C=800mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=800mA, I_B=80mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=800mA, I_B=80mA$			1.2	V
Transition frequency	f_T	$V_{CE}=6V, I_C=20mA$ $f=30MHz$	150			MHz

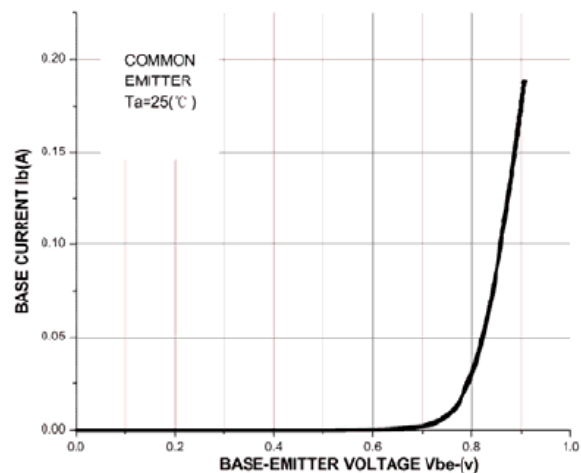
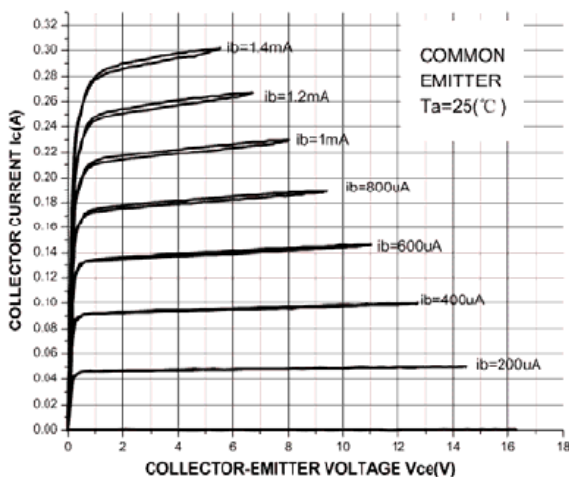
CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H
Range	80-200	200-300

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

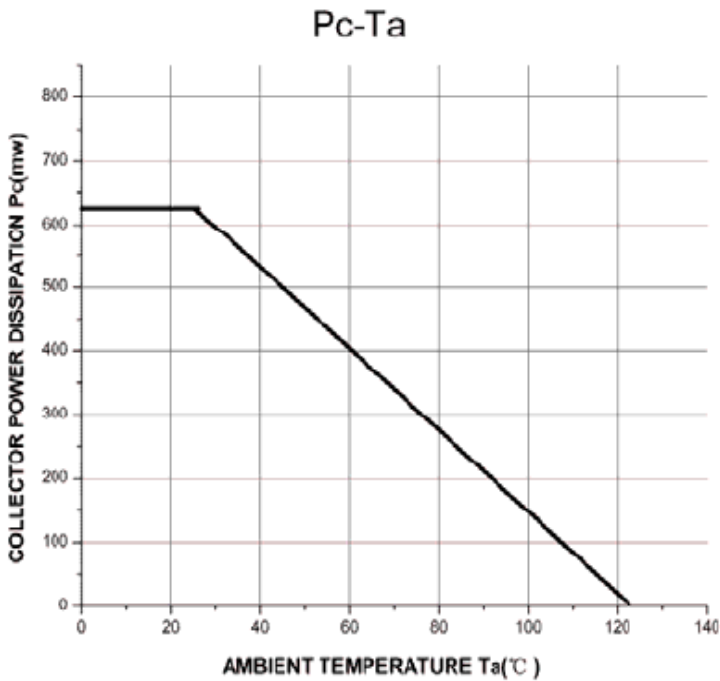
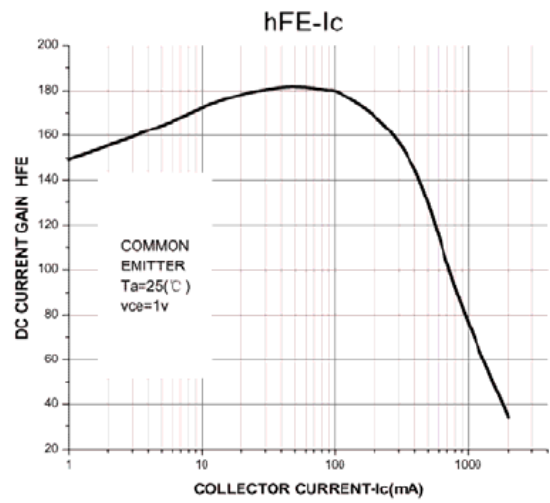
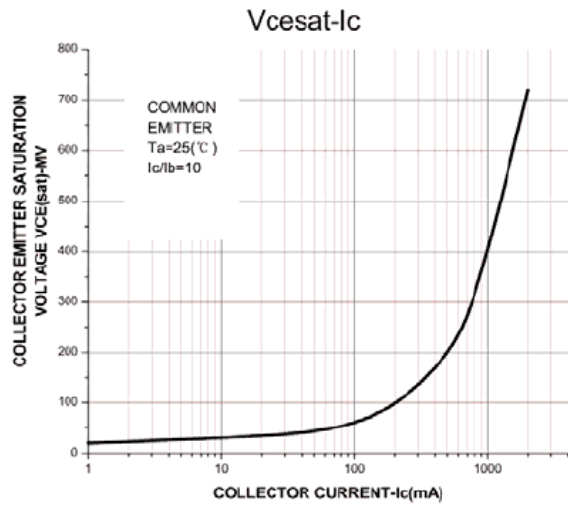
I_C - V_{ce}

I_b - V_{be}



Silicon Epitaxial Planar Transistor

M8050



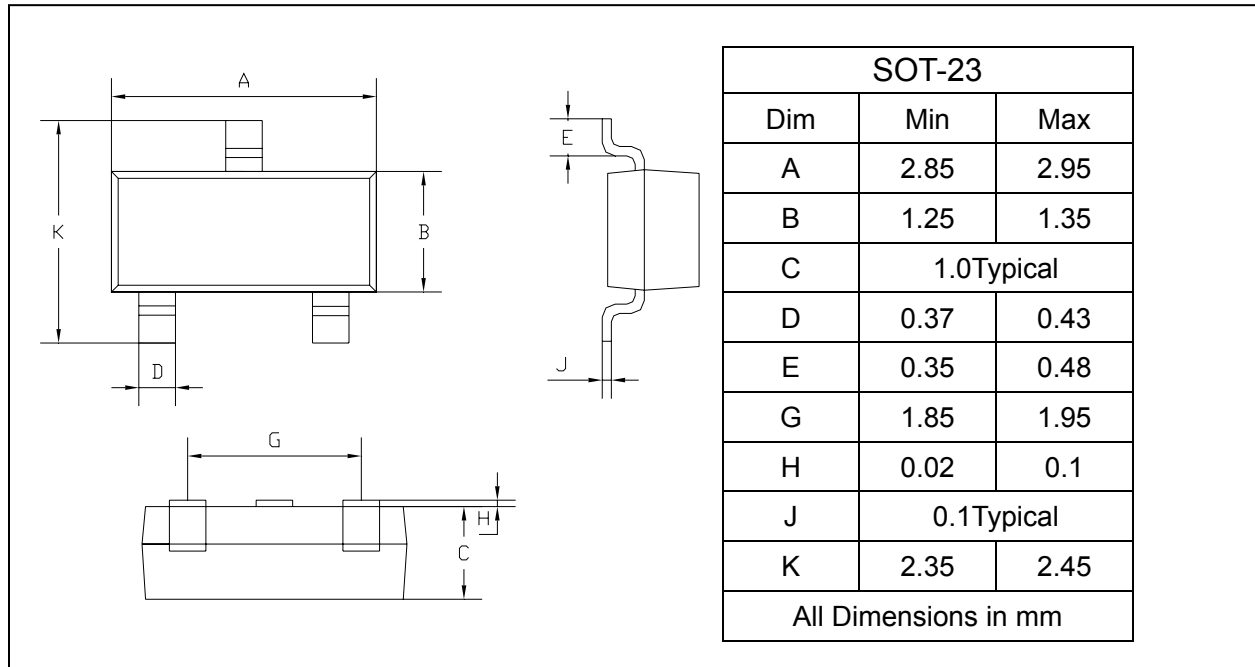
Silicon Epitaxial Planar Transistor

M8050

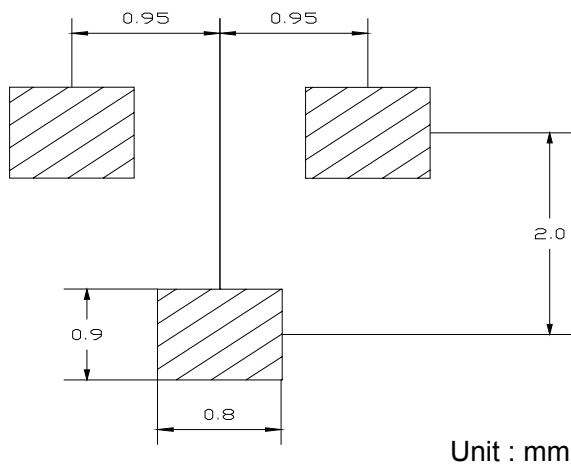
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
M8050	SOT-23	3000/Tape&Reel