DESCRIPTION

The H8050P~H8050Q are available in SOT-23 package.

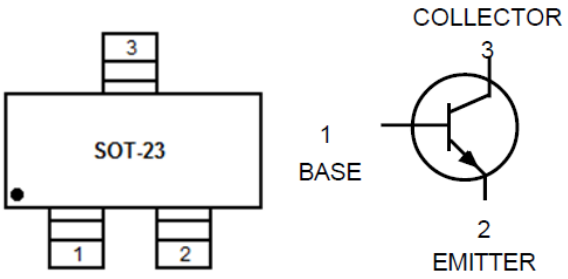
FEATURES

- High current capacity in compact package. I_C =1.5A.
- Epitaxial planar type.
- NPN complement: H8050
- Available in SOT-23 package

ORDERING INFORMATION

Package Type	Part Number
SOT-23	H8050P
	H8050Q
Note	3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



ABSOLUTE MAXIMUM RATINGS

V_{CEO}, Collector-Emitter Voltage	50V
V_{CBO}, Collector-Base Voltage	50V
V_{EBO}, Emitter-Base Voltage	6V
I_C, Collector Current-continuous	1500mAdc

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

THERMAL CHARACTERISTICS

Parameter	Symbol	Max.	Unit
Total Dissipation Power	P_D	225	mW
Junction and Storage Temperature	T_J , T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

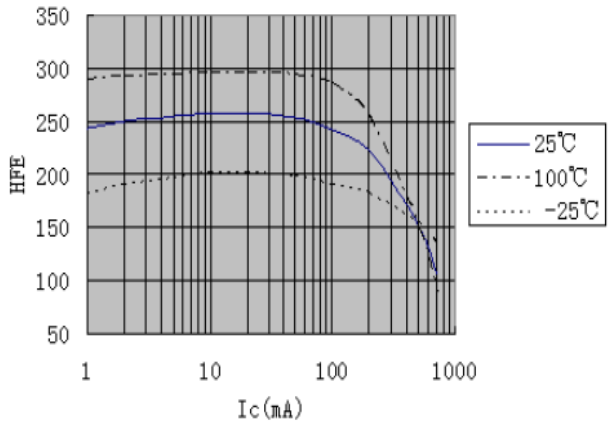
T_A = 25°C, unless otherwise noted

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=2.0mA,I_B=0		50	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=100μA ,I_C=0		6	-	-	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=100μA ,I_E=0		50	-	-	V
Collector Cutoff Current	I_{CBO}	V_{CB}=35V,I_E=0		-	-	100	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=6V,I_C=0		-	-	100	nA
Base-Emitter Voltage	V_{BE}	V_{CE}=1V,I_C =10mA		-	0.66	1	V
DC Current Gain	h_{FE}	I_C=100mA,V_{CE}=1V	P	100	-	200	
			Q	160	-	320	
		I_C=800mA,V_{CE} =1V		40	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(S)}$	I_C=800mA, I_B=80mA		-	-	0.5	V

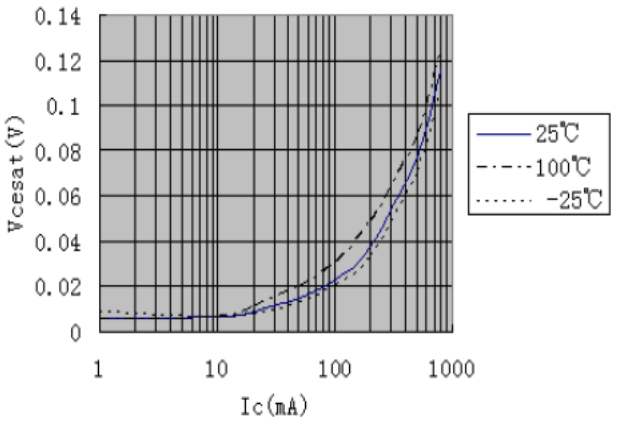
TYPICAL PERFORMANCE CHARACTERISTICS

T_A = 25℃

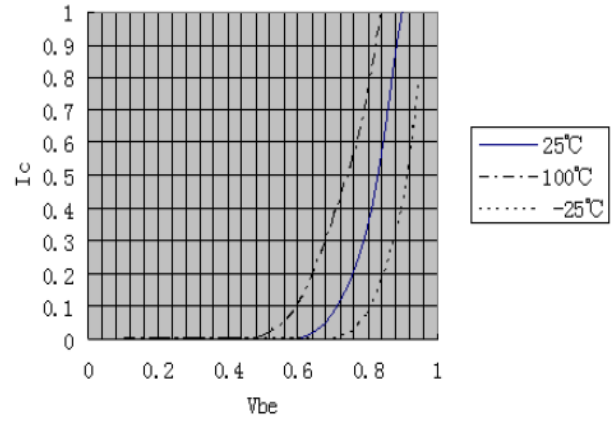
1. h_{FE}-I_C, V_{CE}=1V



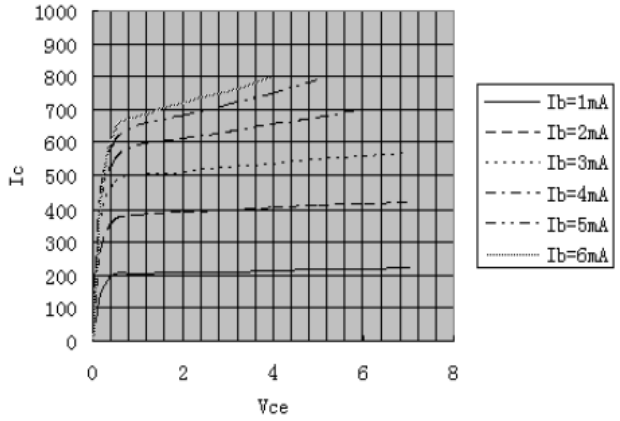
2. V_{CESAT}-I_C,I_C/I_B=10



3. I_C-V_{BE}

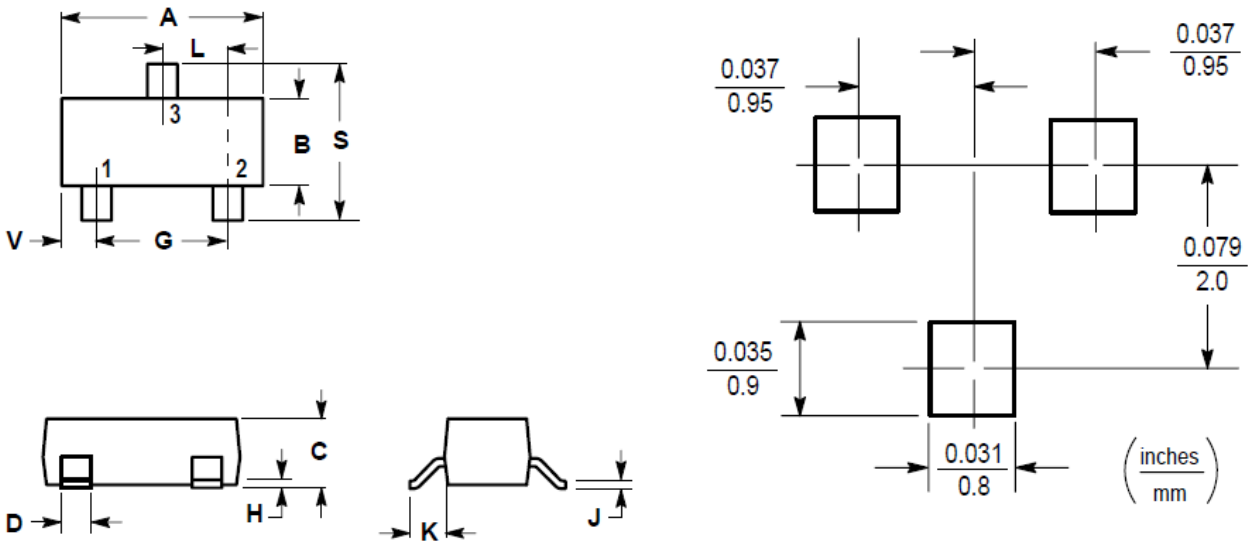


4. I_C-V_{CE}



PACKAGE INFORMATION

Dimension in SOT-23 Package (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.80	3.04	0.1102	0.1197
B	1.20	1.40	0.0472	0.0551
C	0.89	1.11	0.0350	0.0440
D	0.37	0.50	0.0150	0.0200
G	1.78	2.04	0.0701	0.0807
H	0.013	0.100	0.0005	0.0040
J	0.085	0.177	0.0034	0.0070
K	0.35	0.69	0.0140	0.0285
L	0.89	1.02	0.0350	0.0401
S	2.10	2.64	0.0830	0.1039
V	0.45	0.60	0.0177	0.0236

IMPORTANT NOTICE

AiT Semiconductor Inc. (AiT) reserves the right to make changes to any its product, specifications, to discontinue any integrated circuit product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AiT Semiconductor Inc.'s integrated circuit products are not designed, intended, authorized, or warranted to be suitable for use in life support applications, devices or systems or other critical applications. Use of AiT products in such applications is understood to be fully at the risk of the customer. As used herein may involve potential risks of death, personal injury, or servere property, or environmental damage. In order to minimize risks associated with the customer's applications, the customer should provide adequate design and operating safeguards.

AiT Semiconductor Inc. assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.