



DESCRIPTION

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

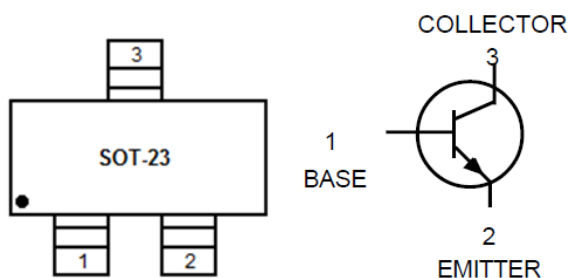
FEATURES

- High current capacity in compact package.
 $I_C \approx 1.5A$.
- 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	1500mA _{dc}

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

$T_A = 25^\circ\text{C}$, unless otherwise noted

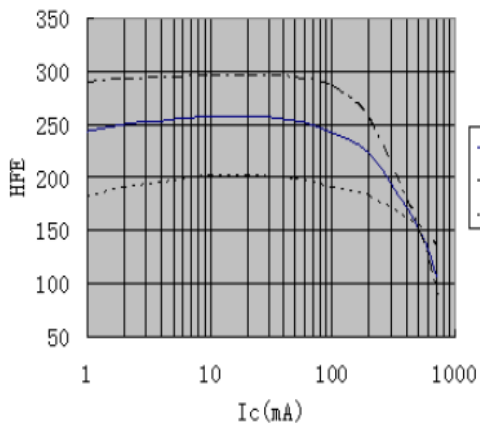
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit	
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=2.0mA, I_B=0$	50	-	-	V	
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	6	-	-	V	
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	50	-	-	V	
Collector Cutoff Current	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	



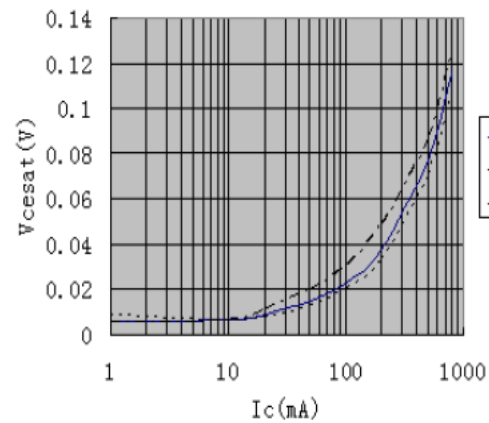
TYPICAL PERFORMANCE CHARACTERISTICS

$T_A = 25^\circ\text{C}$

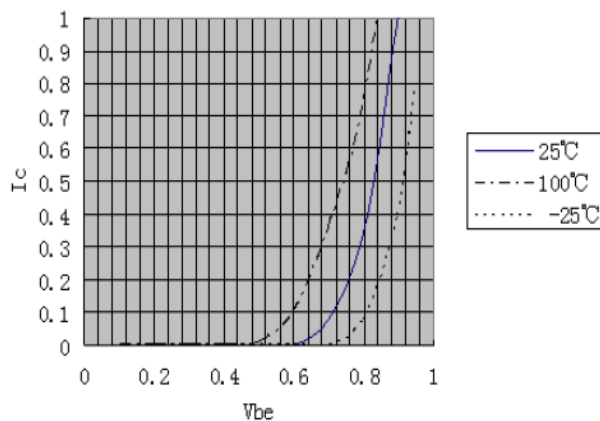
1. $h_{FE}-I_C, V_{CE}=1V$



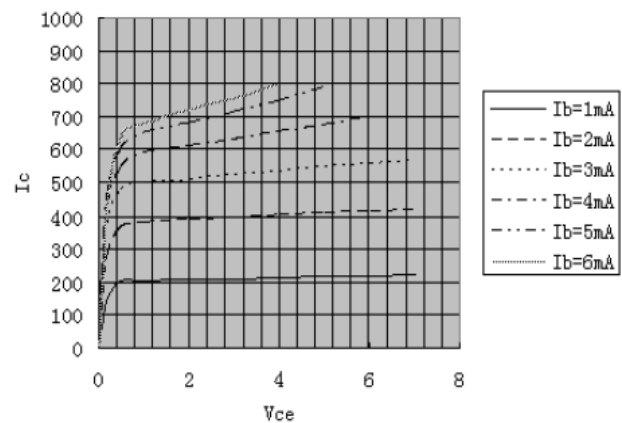
2. $V_{CESAT}-I_C, I_C/I_B=10$



3. I_C-V_{BE}



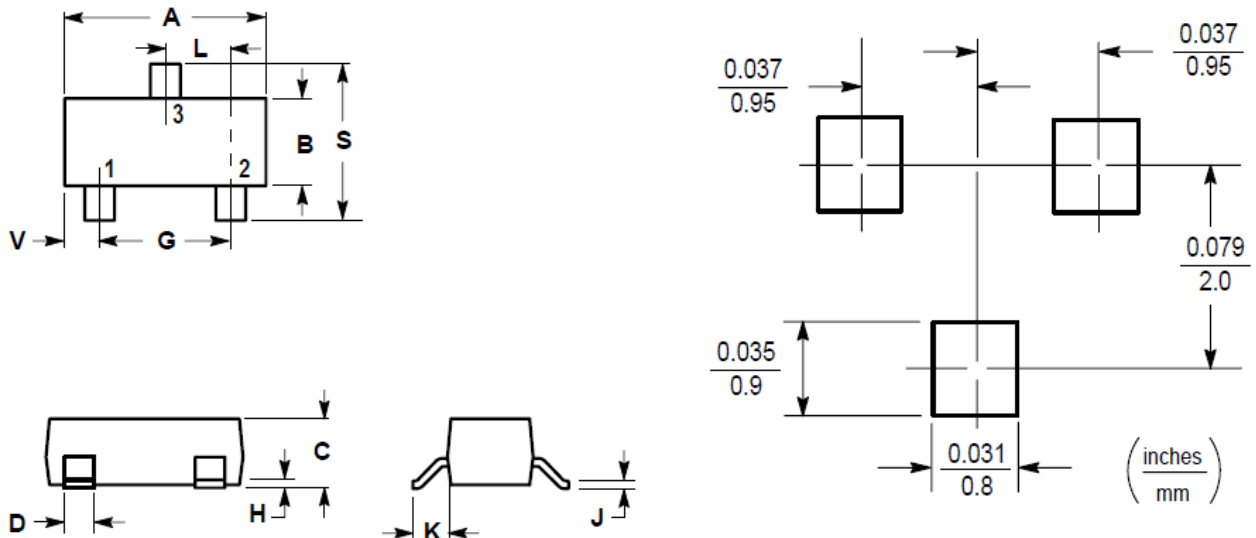
4. I_C-V_{CE}





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



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