



## DESCRIPTION

The H8550P~H8550Q are available in SOT-23 package.

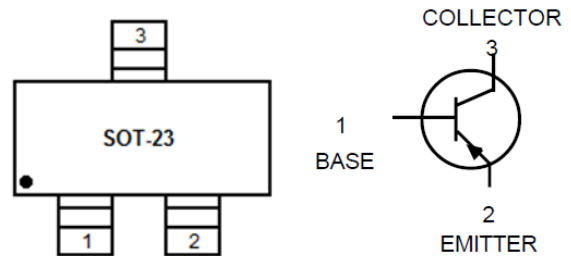
## FEATURES

- High current capacity in compact package.  
 $I_c = -1.5A$ .
- Epitaxial planar type.
- PNP complement: H8550
- Available in SOT-23 package

## ORDERING INFORMATION

Package Type	Part Number
SOT-23	H8550P
	H8550Q
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 <sub>dc</sub>

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

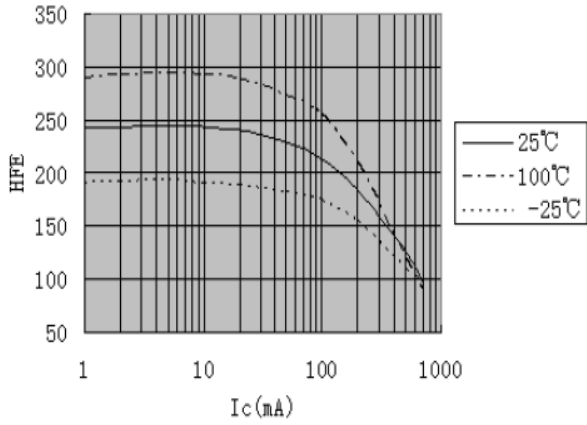
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit	
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -2.0\text{mA}, I_B = 0$	-50	-	-	V	
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-6	-	-	V	
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E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

## TYPICAL PERFORMANCE CHARACTERISTICS

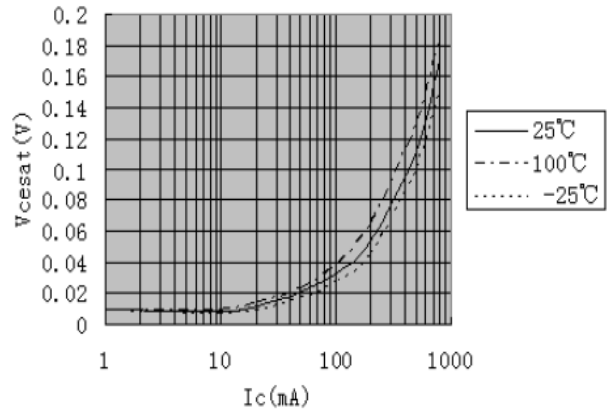


$T_A = 25^\circ\text{C}$

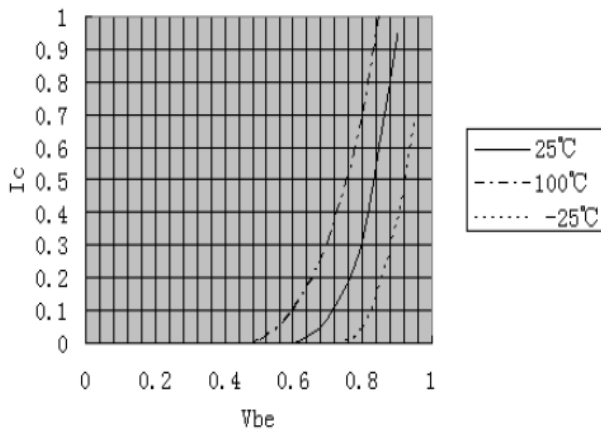
1.  $h_{FE}-I_C, V_{CE}=1\text{V}$



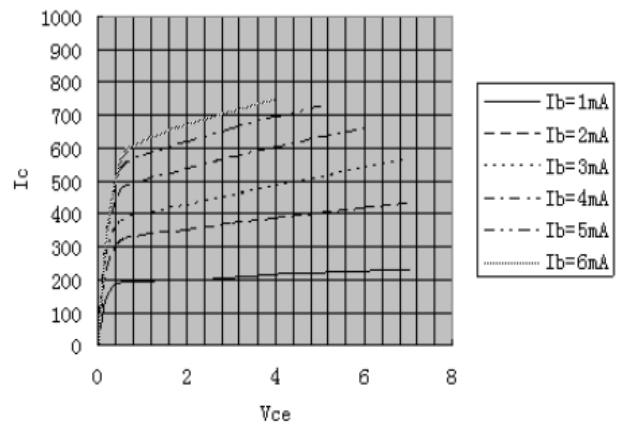
2.  $V_{CESAT}-I_C, I_C/I_B=10$



3.  $I_C-V_{BE}$



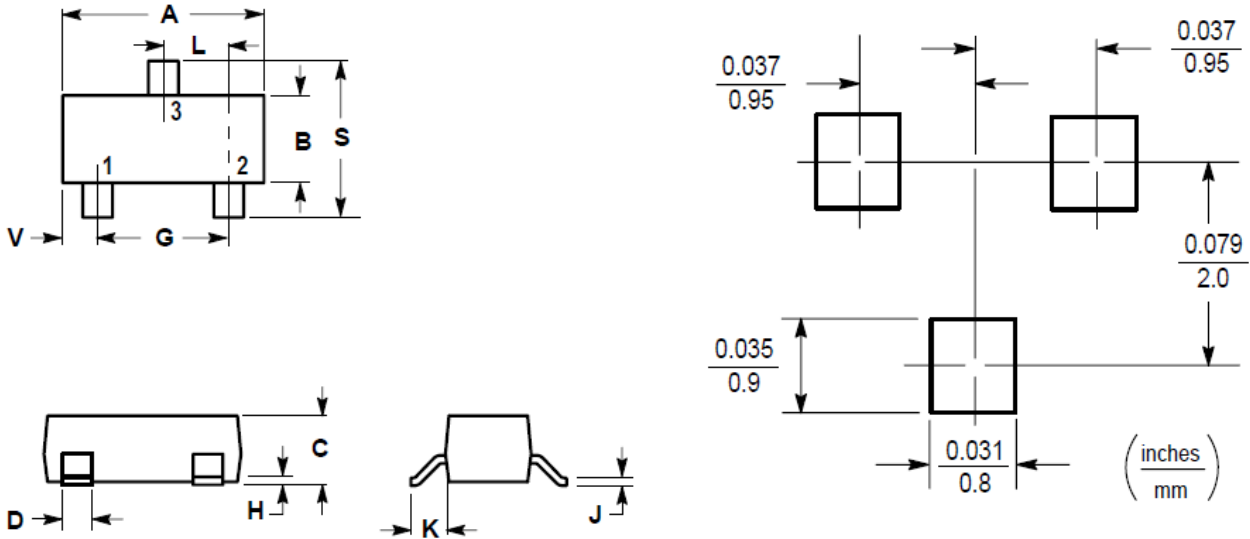
4.  $I_C-V_{CE}$





**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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