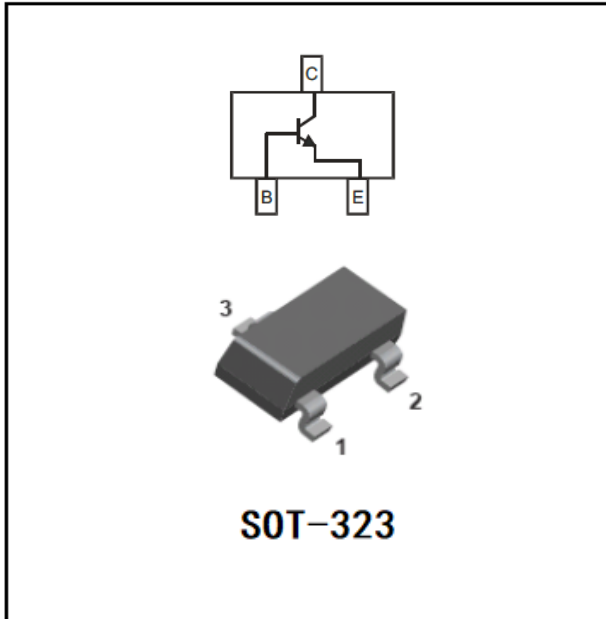


## NPN General Purpose Amplifier



### Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture Sensitivity Level 1
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion

### Mechanical Data

- **Package:** SOT-323
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:**

SS8050W-L	Y1·L
SS8050W-H	Y1

### ■ Maximum Ratings (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Value
Minimum Collector-Emitter Voltage	$V_{CEO}$	V		25
Minimum Collector-Base Voltage	$V_{CBO}$	V		40
Minimum Emitter-Base Voltage	$V_{EBO}$	V		5.0
Collector Current	$I_C$	A		1.5
Collector Power Dissipation	$P_C$	mW		200
Operation Junction Temperature	$T_j$	°C		-55 to +150
Storage Temperature	$T_{stg}$	°C		-55 to +150



# SS8050W-L THRU SS8050W-H

## ■Electrical Characteristics (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Voltage	$V_{CE0}$	V	$I_C=100\mu A_{dc}, I_B=0$	25	
Collector-Base Voltage	$V_{CB0}$	V	$I_C=100\mu A_{dc}, I_E=0$	40	
Emitter-Base Voltage	$V_{EB0}$	V	$I_E=100\mu A_{dc}, I_C=0$	5	
Collector-Emitter cut-off current	$I_{CEO}$	nAdc	$V_{CE}=20V_{dc}$		100
Collector-Base cut-off current	$I_{CBO}$	nAdc	$V_{CB}=40V_{dc}$		100
Emitter-Base cut-off current	$I_{EB0}$	nAdc	$V_{EB}=5.0V_{dc}$		100
DC Current Gain	$h_{FE(1)}$		$I_C=100mA, V_{CE}=1.0V_{dc}$	120	350
	$h_{FE(2)}$		$I_C=800mA, V_{CE}=1.0V_{dc}$	40	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	Vdc	$I_C=800mA, I_B=80mA$		0.5
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	Vdc	$I_C=800mA, I_B=80mA$		1.2

## ■Small-signal Characteristics

Item	Symbol	Unit	Conditions	Min	Max
Transition frequency	$f_T$	MHz	$I_C=50mA_{dc}, V_{CE}=10V_{dc}, f=30MHz$	100	

## ■CLASSIFICATION OF HFE

Rank	L	H
Range	120-200	200-350

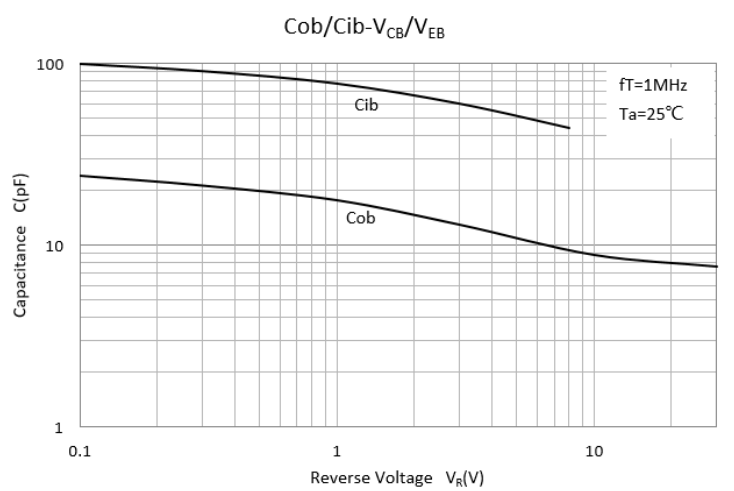
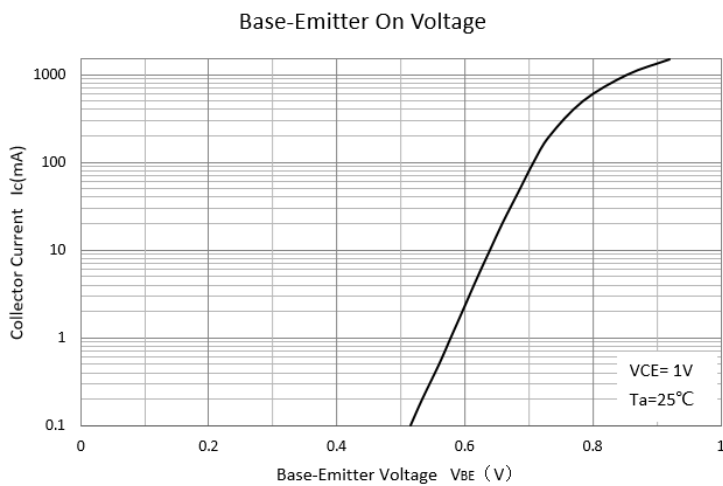
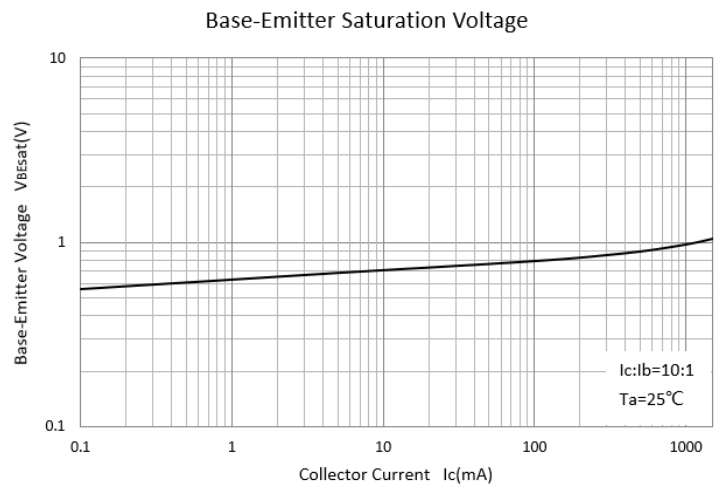
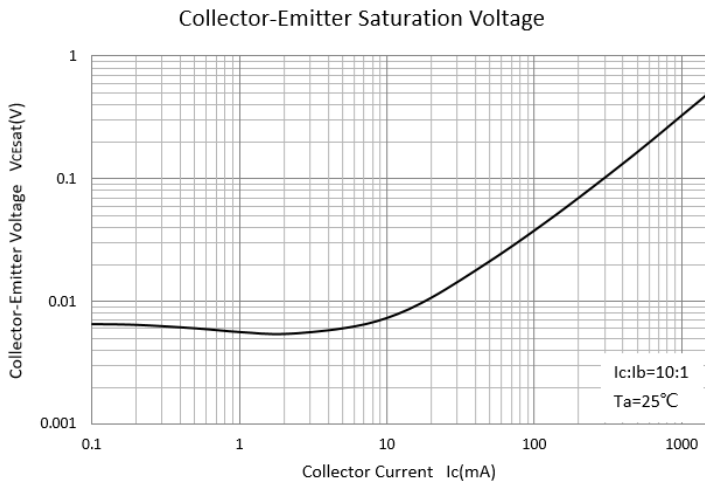
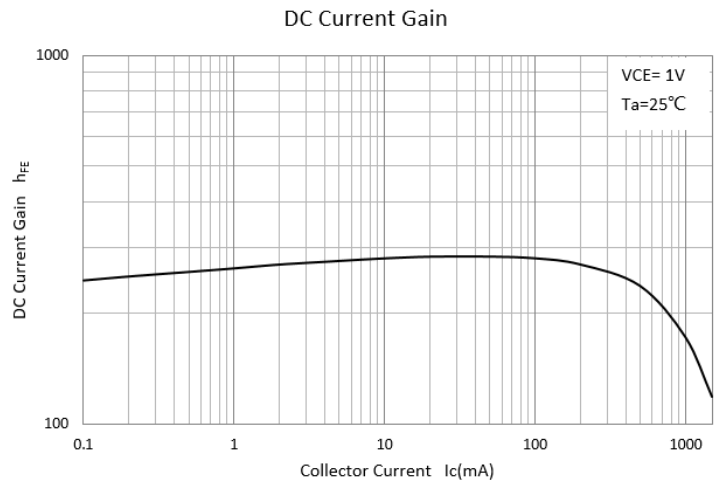
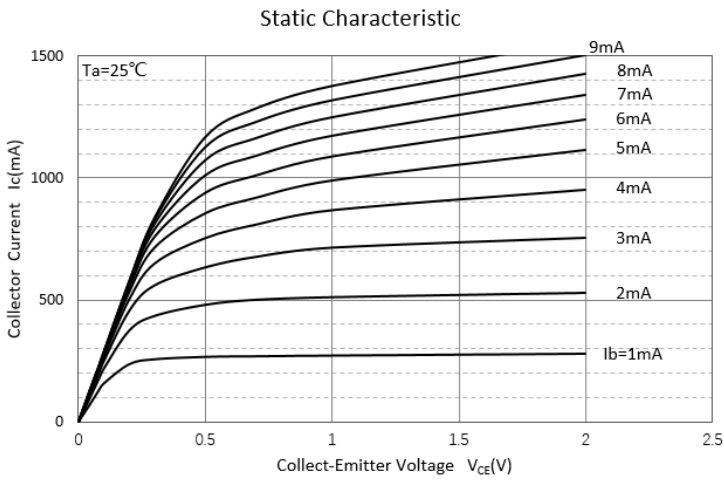
## ■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS8050W	F2	Approximate 0.008	3000	30000	120000	7" reel



# SS8050W-L THRU SS8050W-H

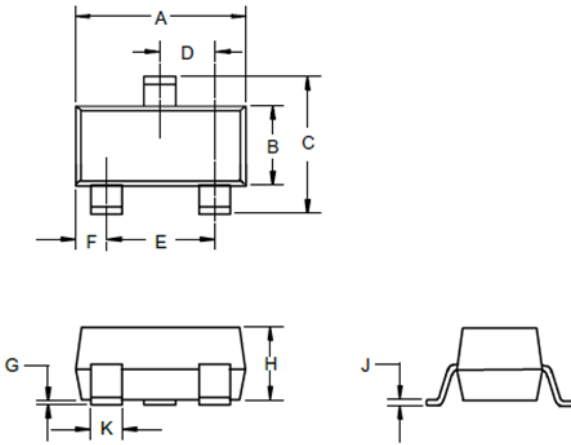
## ■ Characteristics (Typical)





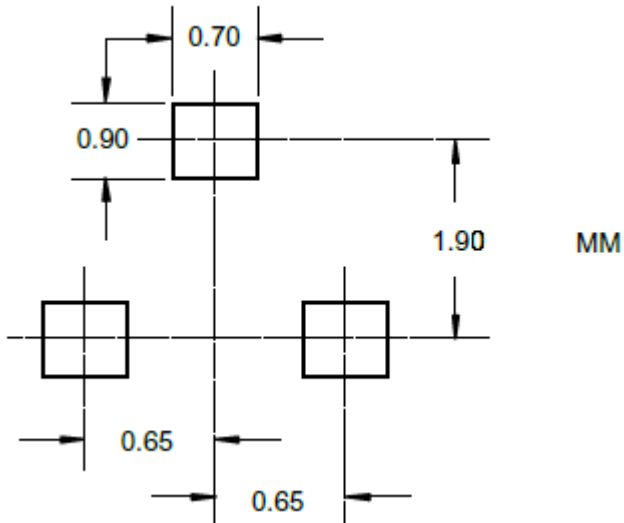
# SS8050W-L THRU SS8050W-H

## ■SOT-323 Package Outline Dimensions



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.071	0.087	1.80	2.20	
B	0.045	0.053	1.15	1.35	
C	0.083	0.096	2.10	2.45	
D	0.026Nominal		0.65Nominal		
E	0.047	0.055	1.20	1.40	
F	0.012	0.016	0.30	0.40	
G	0.000	0.004	0.00	0.10	
H	0.035	0.039	0.90	1.00	
J	0.004	0.010	0.10	0.250	
K	0.006	0.016	0.15	0.40	

## ■SOT-323 Soldering Footprint





## SS8050W-L THRU SS8050W-H

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### Disclaimer

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