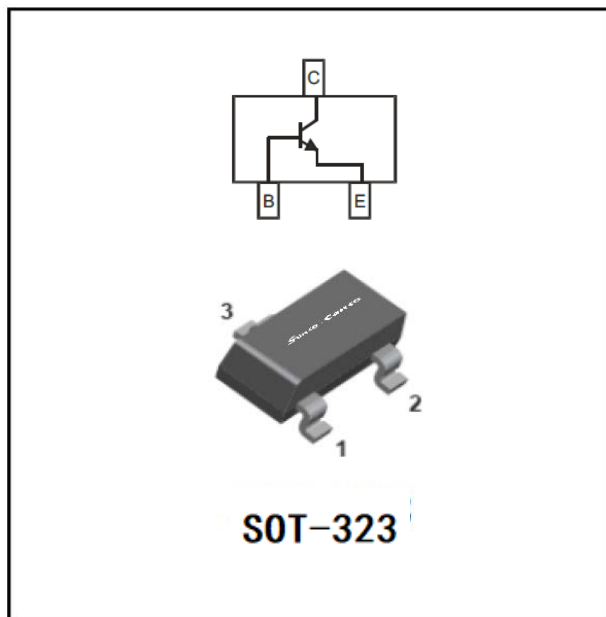


NPN General Purpose Amplifier



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, -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℃ unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Voltage	V_{CEO}	V	$I_C=100\mu A$, $I_B=0$	25	
Collector-Base Voltage	V_{CBO}	V	$I_C=100\mu A$, $I_E=0$	40	
Emitter-Base Voltage	V_{EBO}	V	$I_E=100\mu A$, $I_C=0$	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_{EBO}	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	$I_C=50mA$, $V_{CE}=10V$ dc, $f=30MHz$	100	

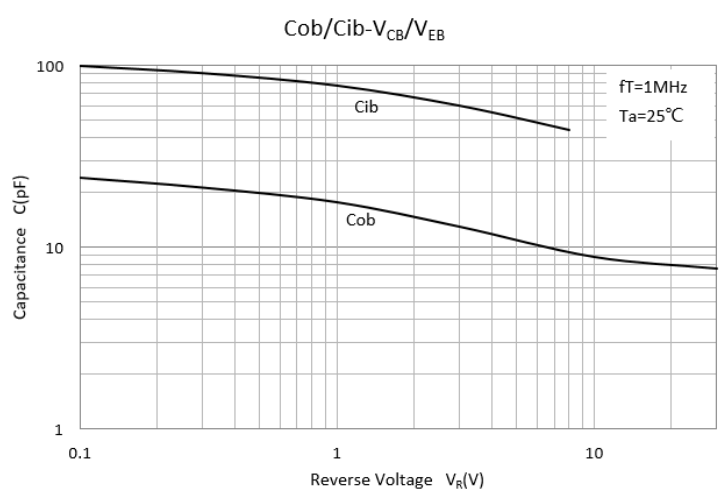
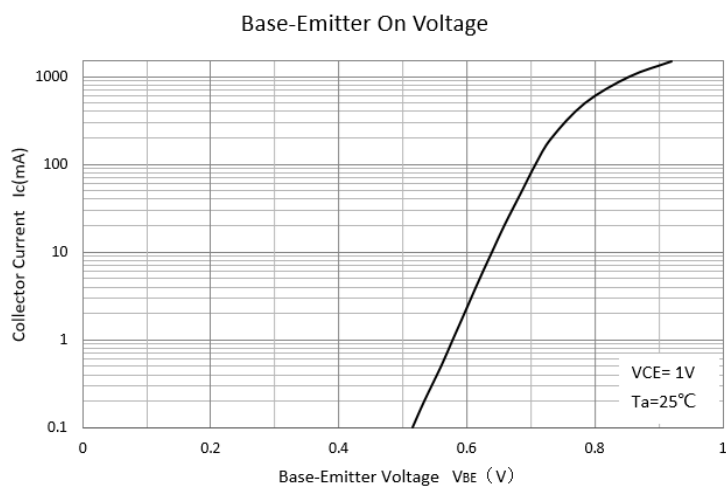
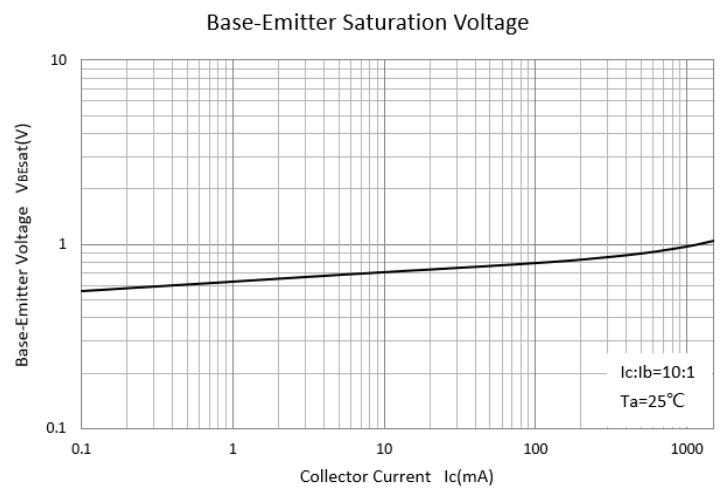
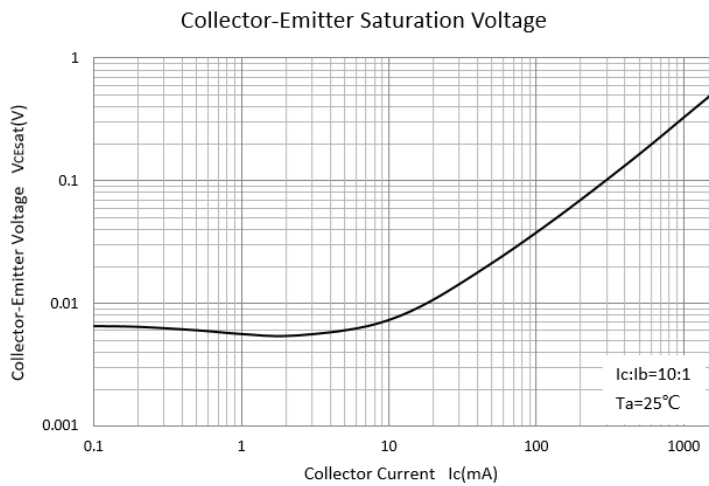
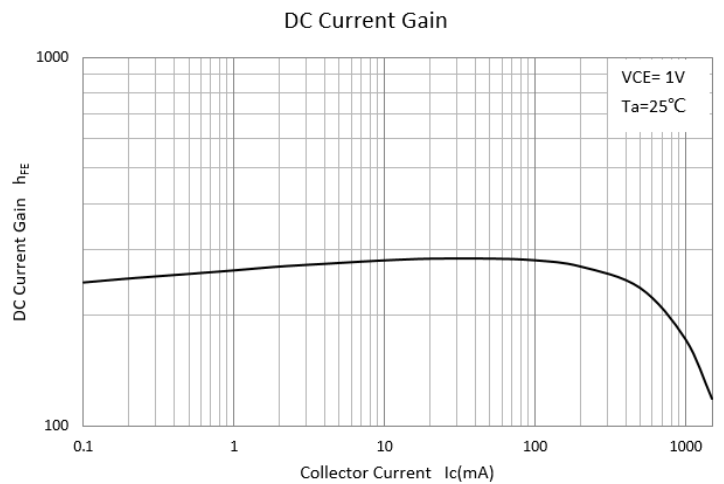
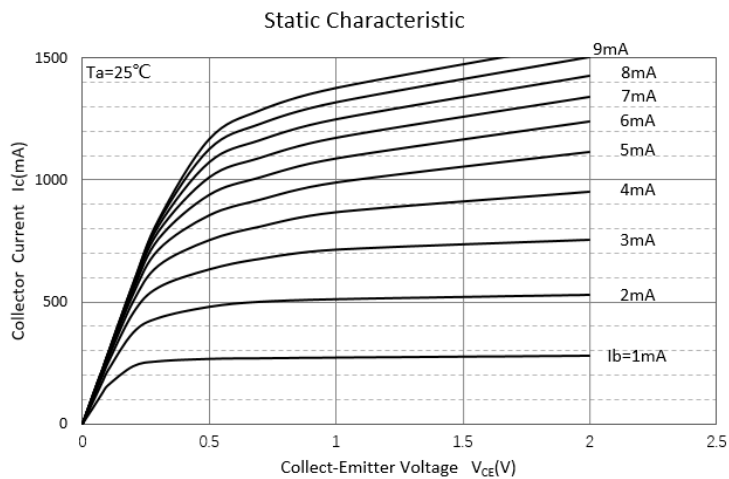
■CLASSIFICATION OF HFE

Rank	L	H
Range	120-200	200-350

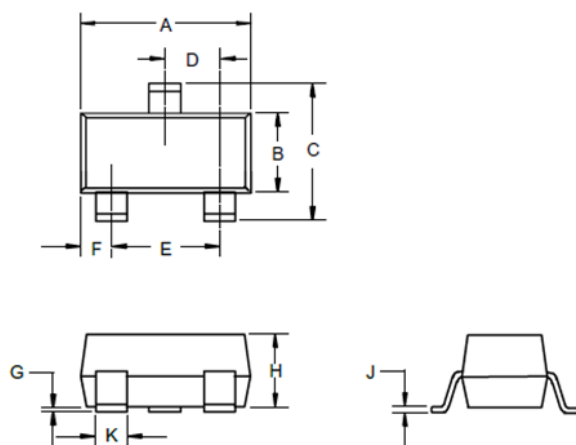
■Ordering Information (Example)

PREFERRED 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

■ Characteristics (Typical)

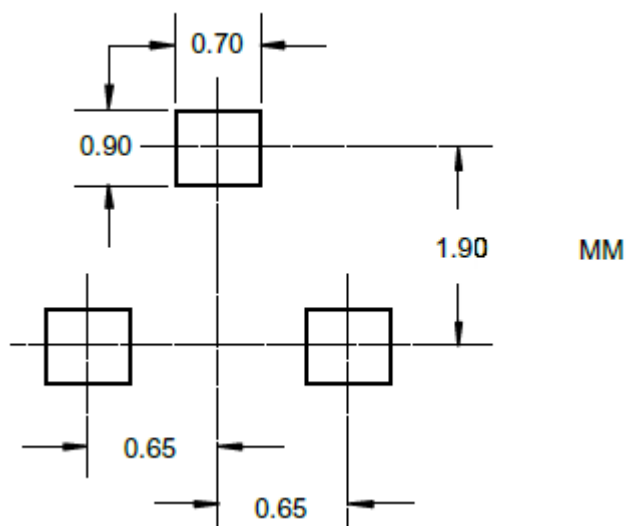


■SOT-323 Package Outline Dimensions



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



Disclaimer

The information presented in this document is for reference only. Shanghai Sunco Electronics Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Russiansunco or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.russiansunco.com](http://www.russiansunco.com) , or consult your nearest Russiansunco's sales office for further assistance.