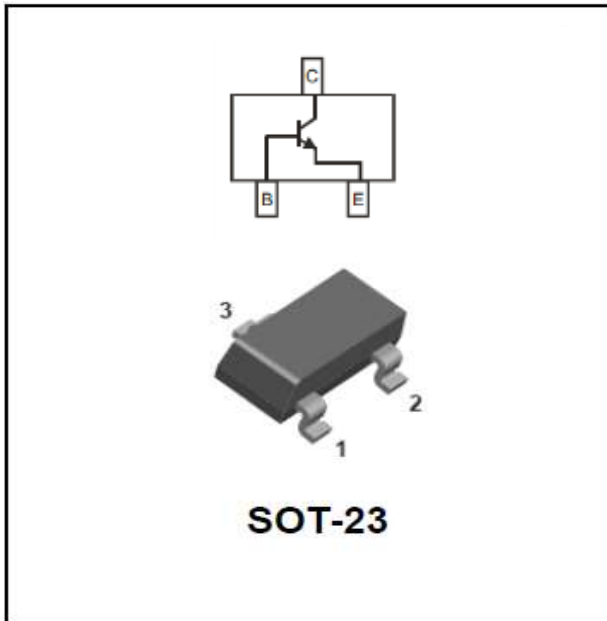


NPN General Purpose Amplifier



Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking:
SS8050-L : Y1 • L
SS8050-H: Y1



■ Off Characteristics

Item	Symbol	Unit	Conditions	Value
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	$I_E=100\mu A_{dc}$, $I_C=0$	5.0
Collector Current	I_C	A		1.5
Collector Cutoff Current	I_{CE0}	nAdc	$V_{CE}=20V_{dc}$	100
Collector Cutoff Current	I_{CB0}	nAdc	$V_{CB}=40V_{dc}$	100
Collector Cutoff Current	I_{EB0}	nAdc	$V_{CE}=5.0V_{dc}$	100
Power Dissipation	P_D	mW		300
Operation Junction Temperature	T_J	°C		-55 to +150
Storage Temperature	T_{STG}	°C		-55 to +150

■ On Characteristics

Item	Symbol	Unit	Conditions	Min	Max
DC Current Gain	h_{FE}		$I_C=100mA$ $V_{CE}=1.0Vdc$	120	350
			$I_C=800mA$ $V_{CE}=1.0Vdc$	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
Current Gain-Bandwidth Product	f_T	MHz	$I_C=50mA$ dc, $V_{CE}=10Vdc$, $f=30MHz$	100	

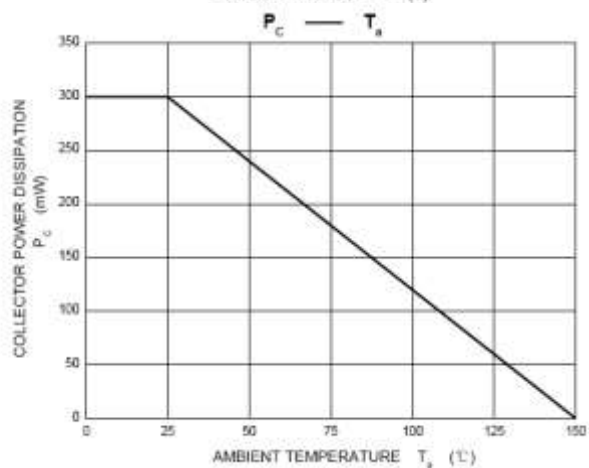
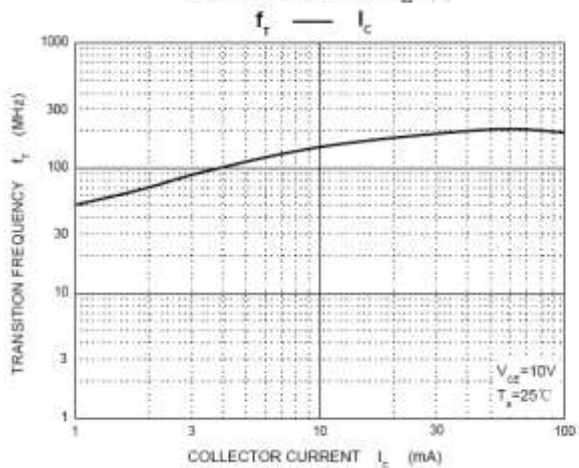
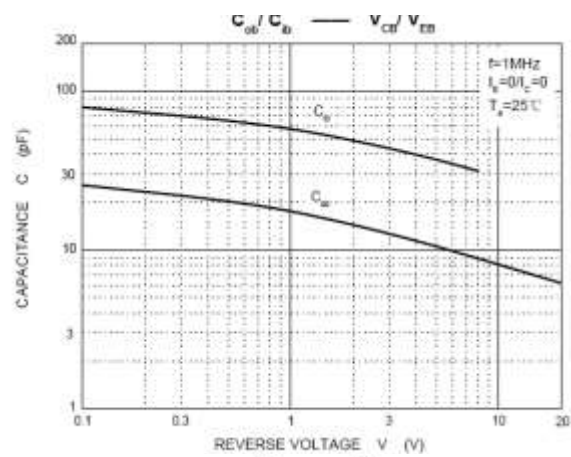
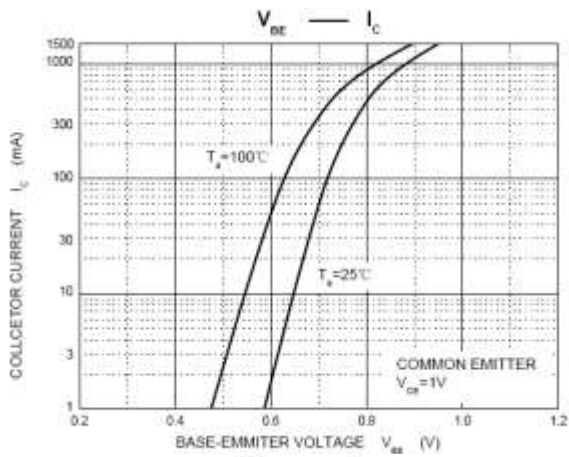
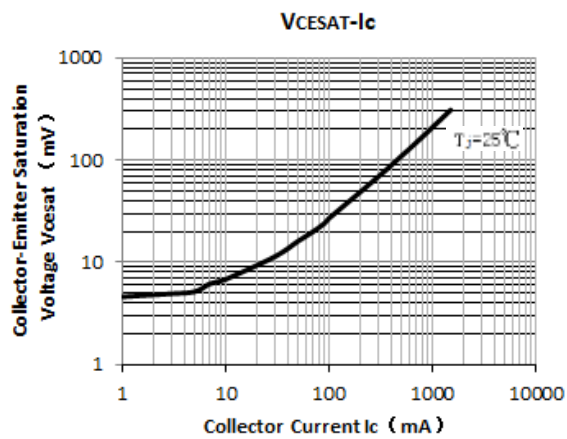
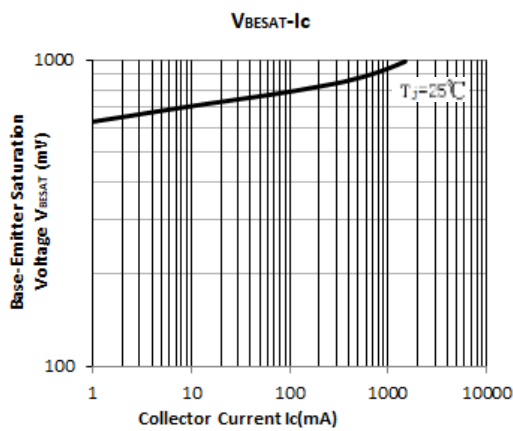
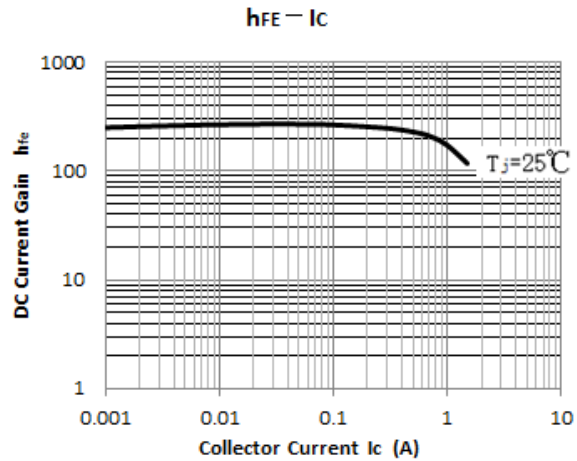
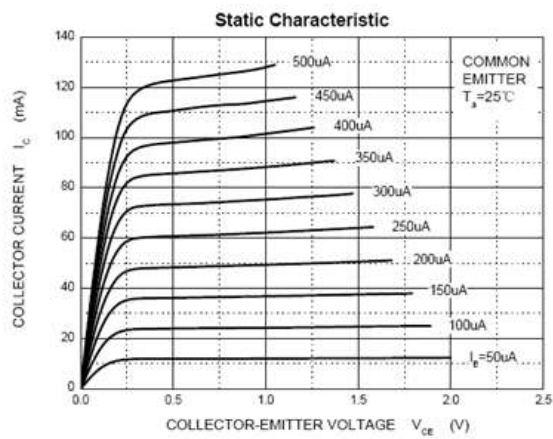
■ CLASSIFICATION OF HFE (1)

Rank	L	H
Range	120-200	200-350

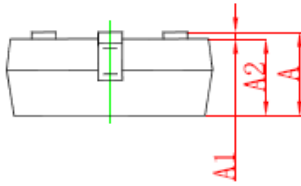
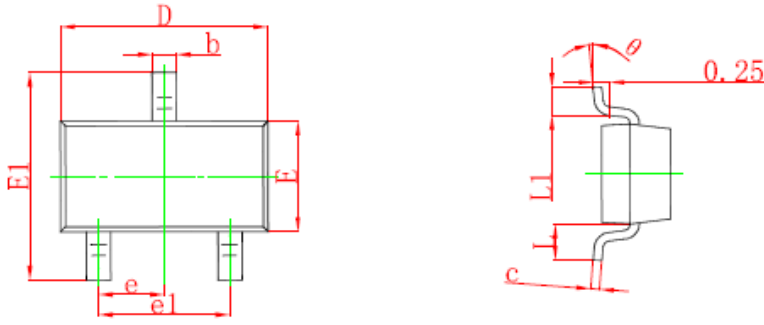
■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS8050	F2	Approximate 0.008	3000	30000	120000	7" reel

Characteristics (Typical)

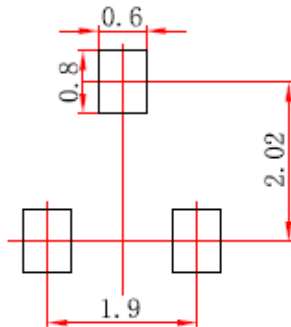


■ SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
theta	0°	8°	0°	8°

■ SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension: In millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

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