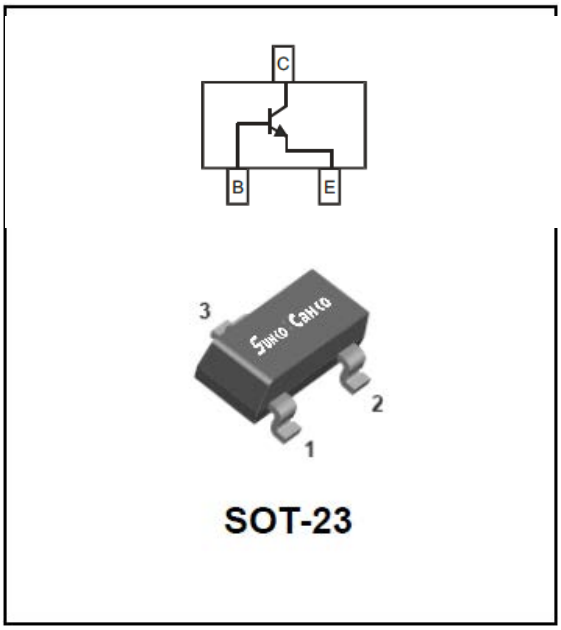
S8050-L THRU S8050-H

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
- Marking:

S8050-L	J3Y • L
S8050-H	J3Y

■ Maximum Ratings (Ta=25℃ unless otherwise noted)

Item	Symbol	Unit	Conditions	Value
Collector-Base Voltage	V_{CBO}	V		40
Collector-Emitter Voltage	V_{CEO}	V		25
Emitter-Base Voltage	V_{EBO}	V		5
Collector Current	I_C	mA		500
Collector Power Dissipation	P_C	mW		300
Operation Junction Temperature	T_j	℃		-55 to +150
Storage Temperature	T_{stg}	℃		-55 to +150

■ Electrical Characteristics (Ta=25℃ unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	V_{CBO}	V	IC=100uA,IE=0	40		
Collector-emitter breakdown voltage	V_{CEO}	V	IC =100uA,IB=0	25		
Emitter-base breakdown voltage	V_{EBO}	V	IE=100μA,IC=0	5		
Collector-Emitter cut-off current	I_{CEX}	nA	VCE=20V, VBE=3V			100
Collector-base cut-off current	I_{CBO}	nA	VCB=40V, IE=0			100
Emitter-base cut-off current	I_{EBO}	nA	VEB=5V, IC =0			100
DC current gain	$h_{FE(1)}$		VCE=1V,IC=50mA	120		350
	$h_{FE(2)}$		VCE=1V,IC=500mA	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	IC=500mA,IB=50mA			0.6
Base-emitter saturation voltage	$V_{BE(sat)}$	V	IC=500mA,IB=50mA			1.2
Transition frequency	f_T	MHz	VCE=6V,IC=20mA,f=30MHz	150		

S8050-L THRU S8050-H

■Classification Of HFE

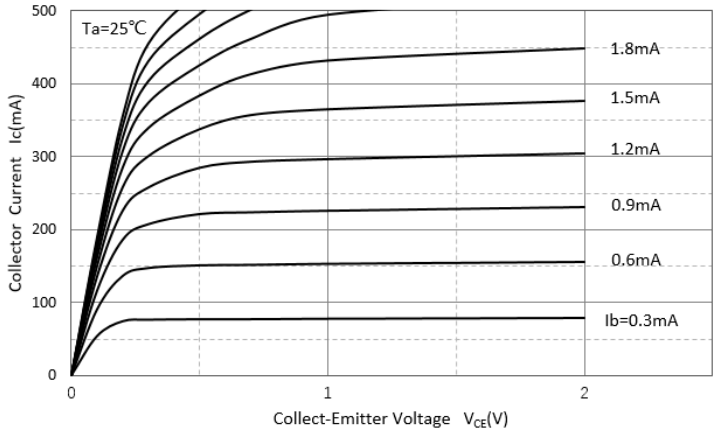
Rank	L	H
Range	120-200	200-350

■ Ordering Information (Example)

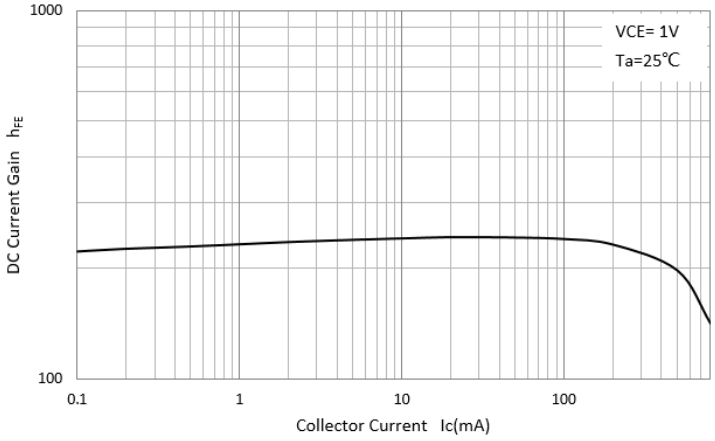
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
S8050	F2	Approximate 0.008	3000	30000	120000	7” reel

■ Characteristics (Typical)

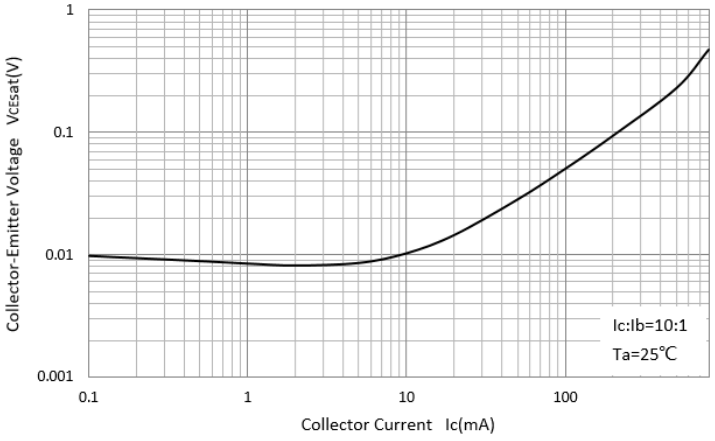
Static Characteristic



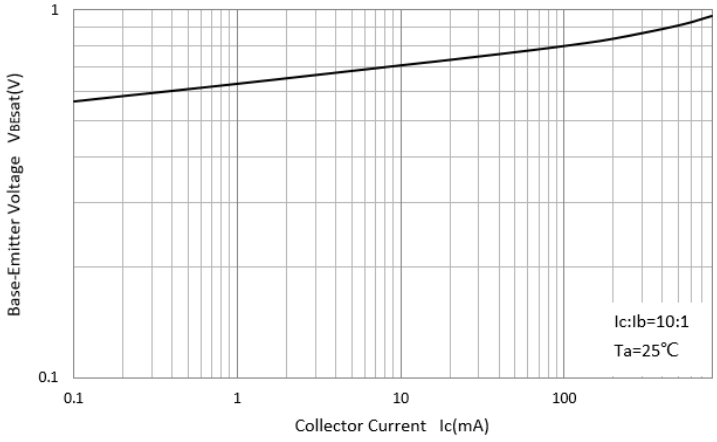
DC Current Gain



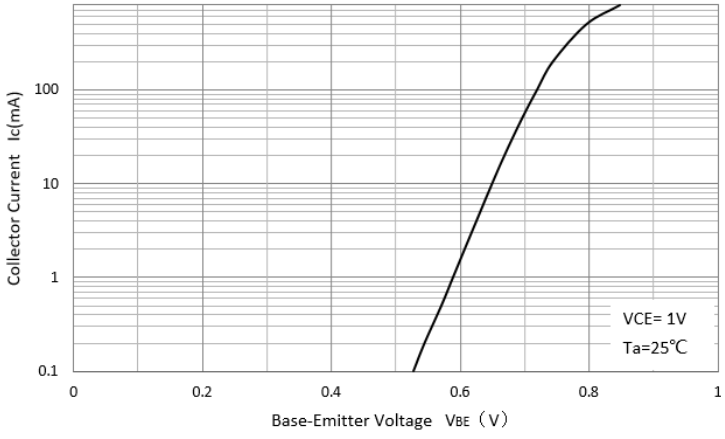
Collector-Emitter Saturation Voltage



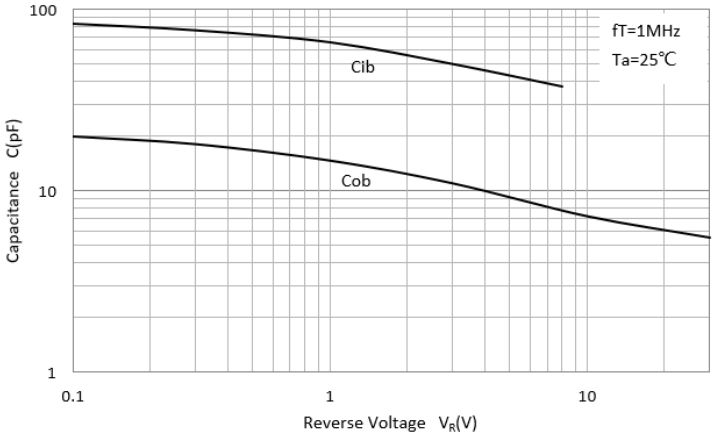
Base-Emitter Saturation Voltage

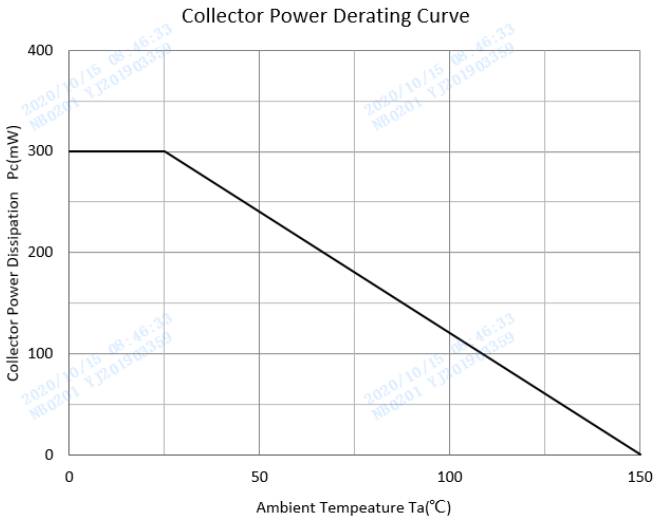


Base-Emitter On Voltage

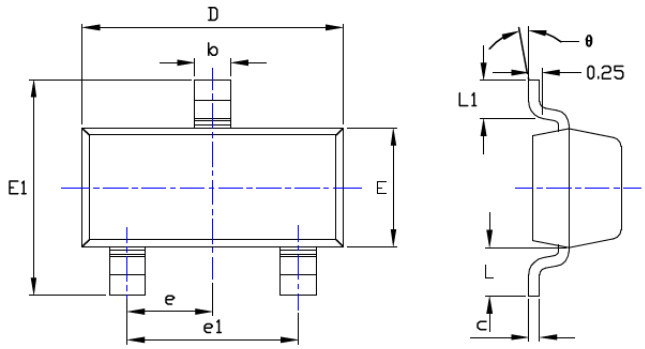


Cob/Cib-V_{CB}/V_{EB}



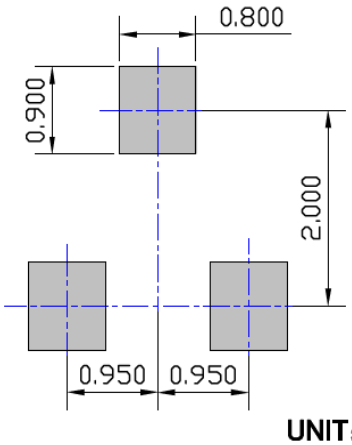


■SOT-23 Package Outline Dimensions



DIMENSIONS				
SYMBOL	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.045	0.900	1.150
A1	0.000	0.004	0.000	0.100
A2	0.035	0.041	0.900	1.050
b	0.012	0.020	0.300	0.500
c	0.004	0.008	0.100	0.200
D	0.110	0.118	2.800	3.000
E	0.047	0.055	1.200	1.400
E1	0.089	0.100	2.250	2.550
e	0.037TYP		0.950TYP	
e1	0.071	0.079	1.800	2.000
L	0.022REF		0.550REF	
L1	0.012	0.020	0.300	0.500
θ	0°	8°	0°	8°

■SOT-23 Soldering Footprint



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