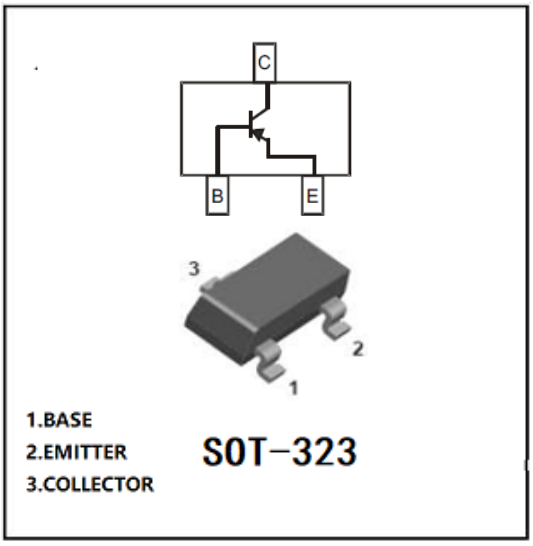
PNP General Purpose Amplifier



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:**

MMSTA55	2H
MMSTA56	2GM

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

Item	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO} MMSTA55 MMSTA56	-60 -80	V
Collector-Emitter Voltage	V_{CEO} MMSTA55 MMSTA56	-60 -80	V
Emitter-Base Voltage	V_{EBO}	-4	V
Collector Current	I_C	-500	mA
Collector Power Dissipation	P_C	200	mW
Operation Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55 to +150	℃

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

Item	Symbol	Unit	Conditions	Min	Max
Collector-base breakdown voltage	V_{CBO}	V	IC=-100μA,IE=0 MMSTA55 MMSTA56	-60 -80	
Collector-emitter breakdown voltage	V_{CEO}	V	IC =-1mA,IB=0 MMSTA55 MMSTA56	-60 -80	
Emitter-base breakdown voltage	V_{EBO}	V	IE=-100μA,IC=0	-4	
Collector-base cut-off current	I_{CBO}	μA	VCB=-60V,IE=0, MMSTA55 VCB=-80V,IE=0, MMSTA56		-0.1 -0.1
Collector-emitter cut-off current	I_{CES}	μA	VCE=-60V, IB=0V,		-0.1
Emitter-base cut-off current	I_{EBO}	uA	VEB=-4V,IC=0		-0.1
DC current gain	h_{FE}		VCE=-1V,IC=-10mA	100	
	h_{FE}		VCE=-1V,IC=-100mA	100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	IC=-100mA,IB=-10mA		-0.25
Base-emitter saturation voltage	$V_{BE(sat)*}$	V	IC=-100mA, IB=-10mA		-1.2

■Other Characteristics（T_a=25℃ Unless otherwise specified）

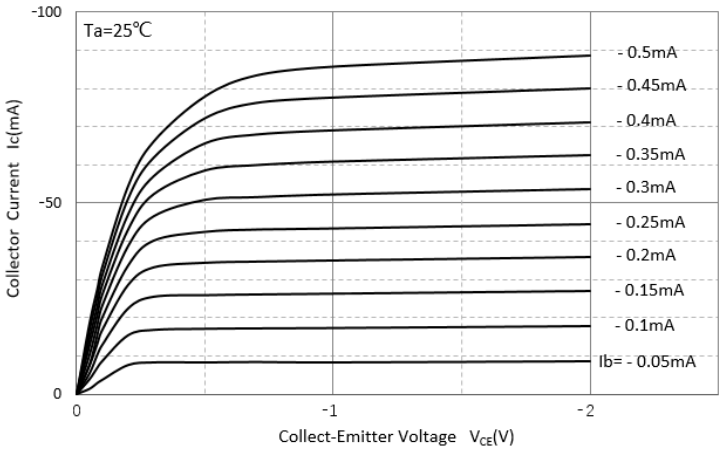
Item	Symbol	Unit	Conditions	Min	Max
Transition frequency	fT	MHz	VCE=-20V,IC=-10mA,f=100MHz	100	

■Ordering Information (Example)

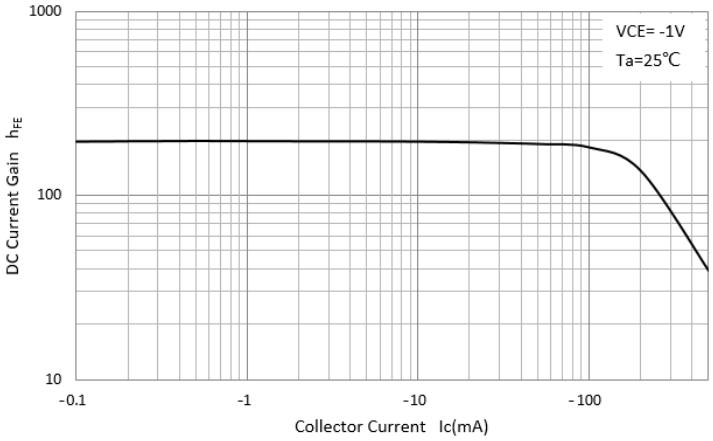
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMSTA55 MMSTA56	F2	Approximate 0.005	3000	30000	120000	7” reel

■**Characteristics**(Typical)

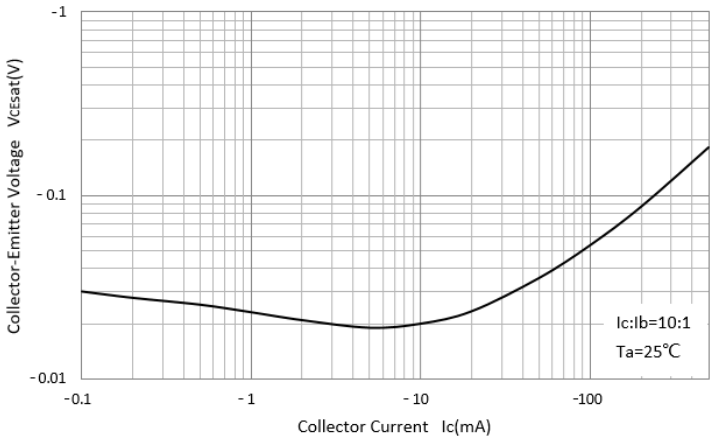
Static Characteristic



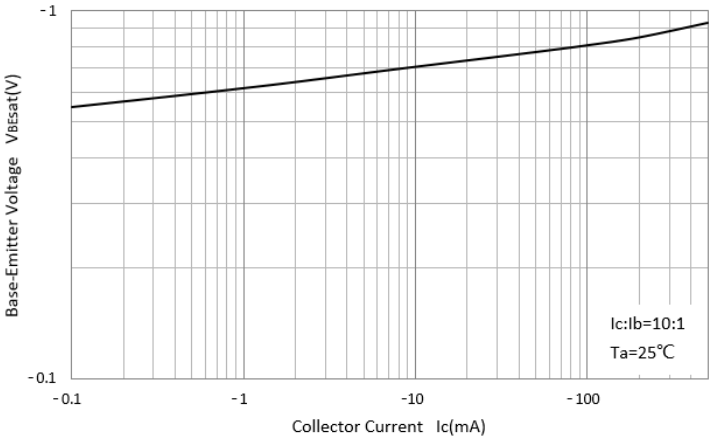
DC Current Gain



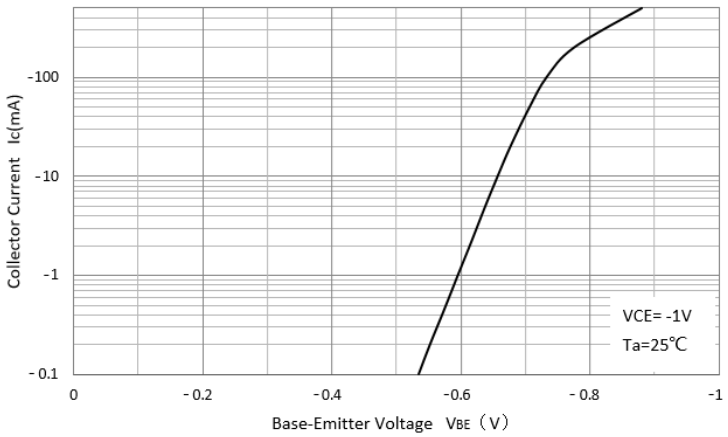
Collector-Emitter Saturation Voltage



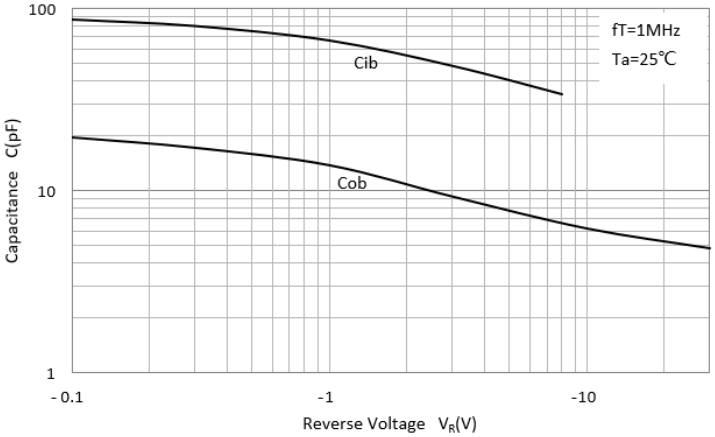
Base-Emitter Saturation Voltage



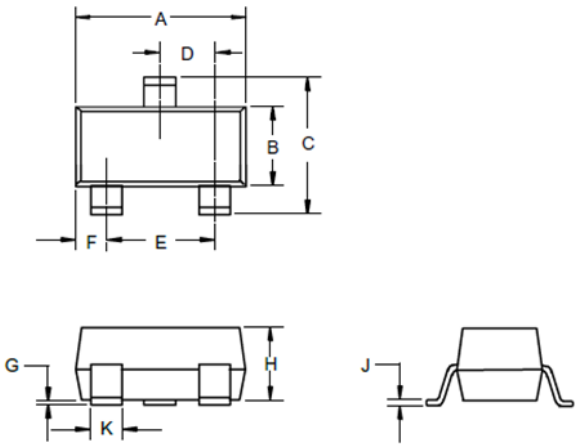
Base-Emitter On Voltage



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

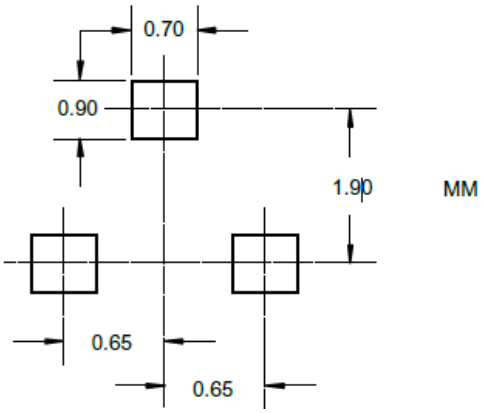


■ SOT-323 Package Outline Dimensions



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

■ SOT-323 Soldering Footprint



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