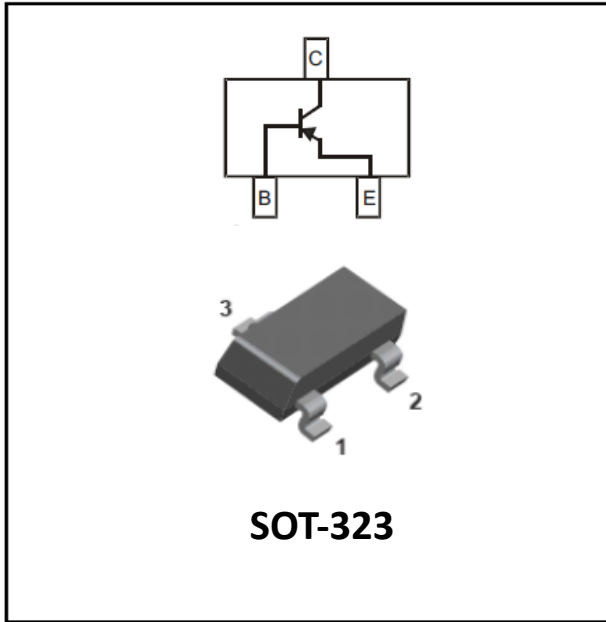


PNP General Purpose Amplifier



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:** K5N

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

Item	Symbol	Unit	Conditions	Value
Collector-Base Voltage	V_{CB0}	V	$I_C = -10\mu A, I_E = 0$	-40
Collector-Emitter Voltage	V_{CE0}	V	$I_C = -1mA, I_B = 0$	-40
Emitter-Base Voltage	V_{EB0}	V	$I_E = -10\mu A, I_C = 0$	-5
Collector Current	I_C	mA		-200
Collector Power Dissipation	P_C	mW		200
Operation Junction Temperature	T_j	°C		-55 to +150
Storage Temperature	T_{stg}	°C		-55 to +150


■Electrical Characteristics (T_a=25°C Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Max
Collector-base breakdown voltage	V _{CBO}	V	IC=-10μA,IE=0	-40	
Collector-emitter breakdown voltage	V _{CEO}	V	IC=-1mA,IB=0	-40	
Emitter-base breakdown voltage	V _{EBO}	V	IE=-10μA,IC=0	-5	
Collector-Base cut-off current	I _{CBO}	nA	VCB=-40V,IE=0		-100
Collector-Emitter cut-off current	I _{CEX}	nA	VCE=-30V, VEB=-3V,		-50
DC current gain	h _{FE}		VCE=-1V,IC=-100uA	60	
	h _{FE}		VCE=-1V,IC=-1mA	80	
	h _{FE}		VCE=-1V,IC=-10mA	100	300
	h _{FE}		VCE=-1V,IC=-50mA	60	
	h _{FE}		VCE=-1V,IC=-100mA	30	
Collector-emitter saturation voltage	V _{CE(sat)}	V	IC=-50mA,IB=-5mA		-0.4
Base-emitter saturation voltage	V _{BE(sat)*}	V	IC=-50mA,IB=-5mA		-0.95

■Other Characteristics (T_a=25°C Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Max
Transition frequency	Ft	MHz	VCE=-20V,IC=-10mA,f=100MHz	250	
Delay time	td	ns	VCC=-3V,IC=-10mA, VBE(off)=-0.5V,IB1=-1mA		35
Rise time	tr	ns			
Storage time	ts	ns	VCC=-3V,IC=-10mA, IB1=IB2=-1mA		225
Fall time	tf	ns			

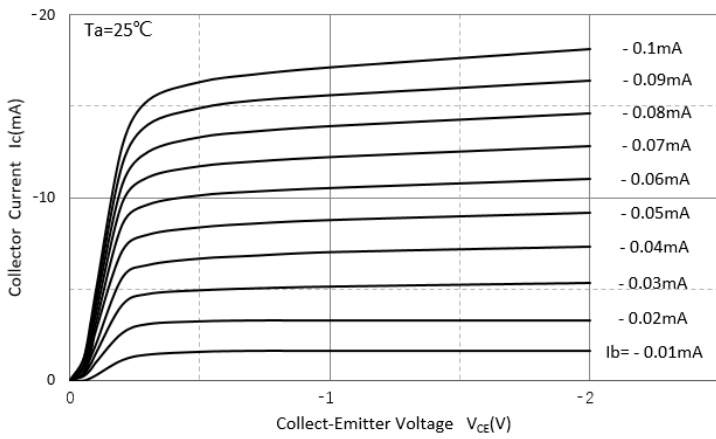
■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMST3906	F2	Approximate 0.005	3000	30000	120000	7" reel

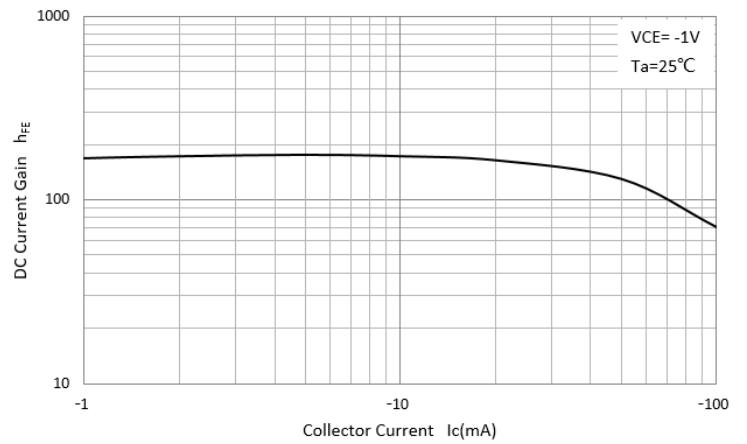


■ Characteristics(Typical)

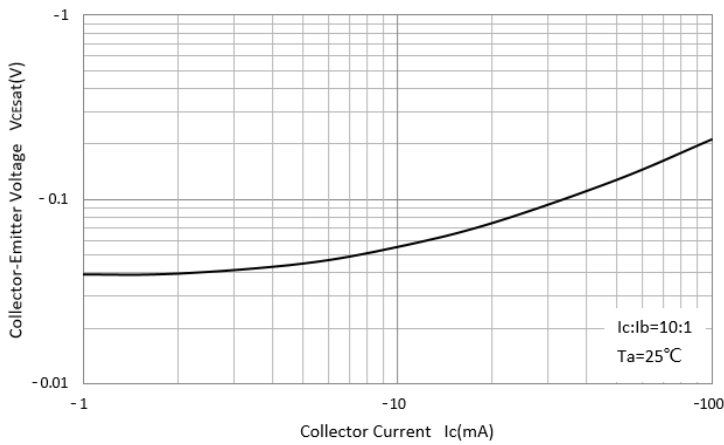
Static Characteristic



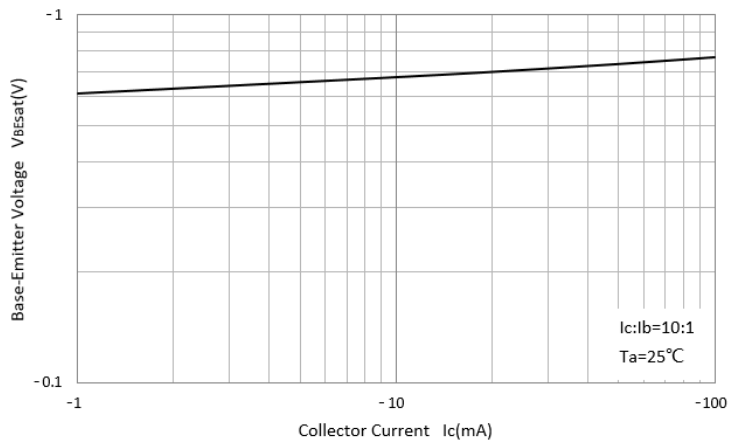
DC Current Gain



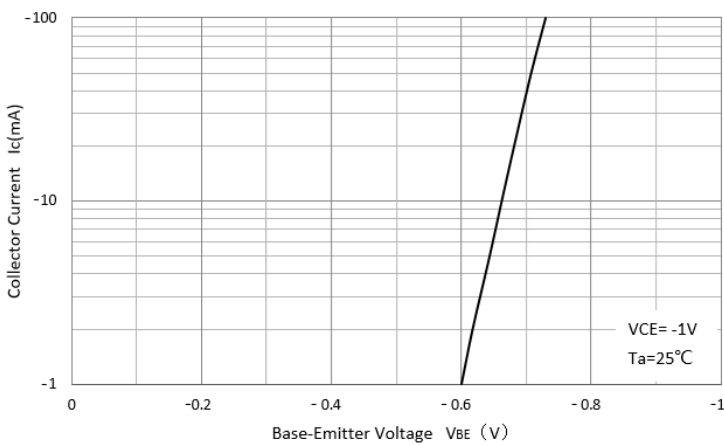
Collector-Emmitter Saturation Voltage



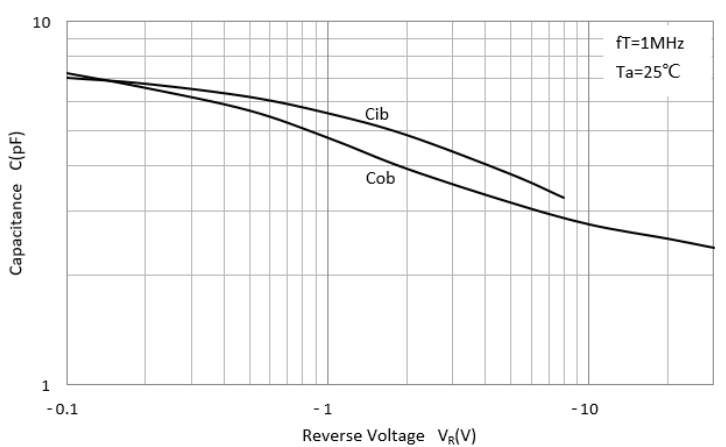
Base-Emmitter Saturation Voltage



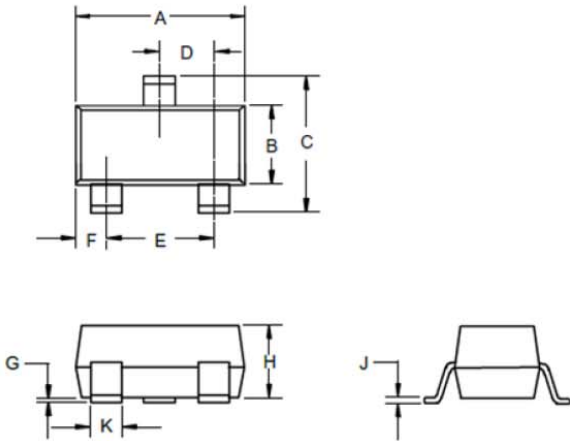
Base-Emmitter On Voltage



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

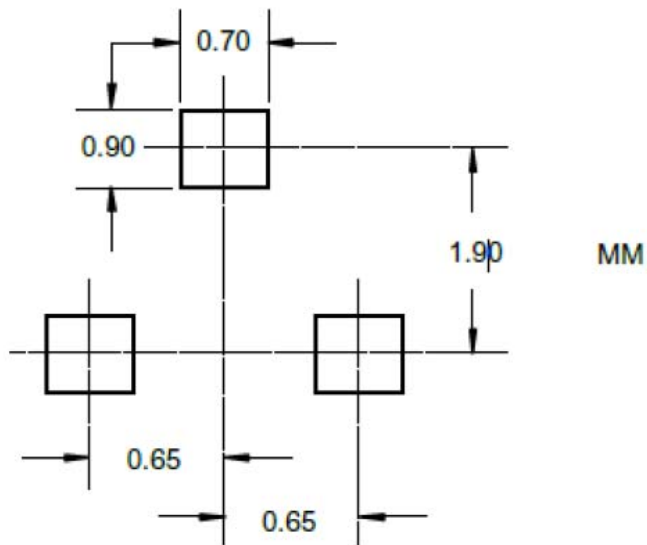


■SOT-323 Package Outline Dimensions



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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





Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology 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), Yangjie 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.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.