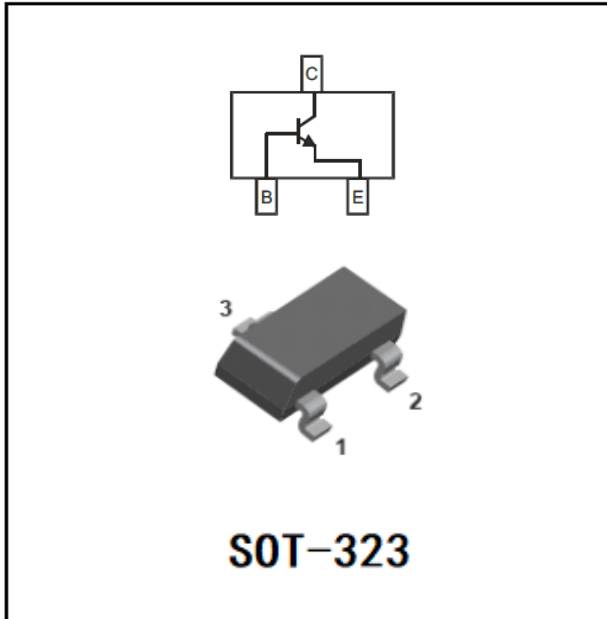


NPN General Purpose Amplifier



Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisure Sensitivity Level 1
- Marking:K4N

■Maximum Rantings (Ta=25°C)

Item	Symbol	Unit	Conditions	Value
Collector-Emitter Voltage*	V_{CEO}	V	$I_C=1.0mA, I_B=0$	160
Collector-Base Voltage	V_{CBO}	V	$I_C=100\mu A, I_E=0$	180
Emitter-Base Voltage	V_{EBO}	V	$I_E=10\mu A, I_C=0$	6.0
Collector Current	I_C	mA		600
Collector Power Dissipation	P_C	mW		200
Operation Junction Temperature	T_j	°C		150
Storage Temperature	T_{stg}	°C		-55 to +150



MMST5551

■Electrical Characteristics (T_a=25°C)

Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Voltage	V _{CEO}	V	I _C =1.0mA, I _B =0	160	
Collector-Base Voltage	V _{CBO}	V	I _C =100μA, I _E =0	180	
Emitter-Base Voltage	V _{EBO}	V	I _E =10μA, I _C =0	6	
Collector-Base Cut-off Current	I _{CBO}	nA	V _{CB} =120Vdc		50
Emitter-Base Cut-off Current	I _{EBO}	nA	V _{EB} =4Vdc		50
DC Current Gain	h _{FE}		I _C =1.0mA V _{CE} =5.0Vdc	80	
			I _C =10mA V _{CE} =5.0Vdc	100	300
			I _C =50mA V _{CE} =5.0Vdc	30	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	V	I _C =50mA I _B =5.0mA		0.2
Base-Emitter Saturation Voltage	V _{BE(sat)}	V	I _C =50mA I _B =5.0mA		1.0

■Small-signal Characteristics (T_a=25°C)

Item	Symbol	Unit	Conditions	Min	Max
Transition frequency	f _T	MHz	I _C =10mA, V _{CE} =5.0Vdc, f=30MHz	100	300

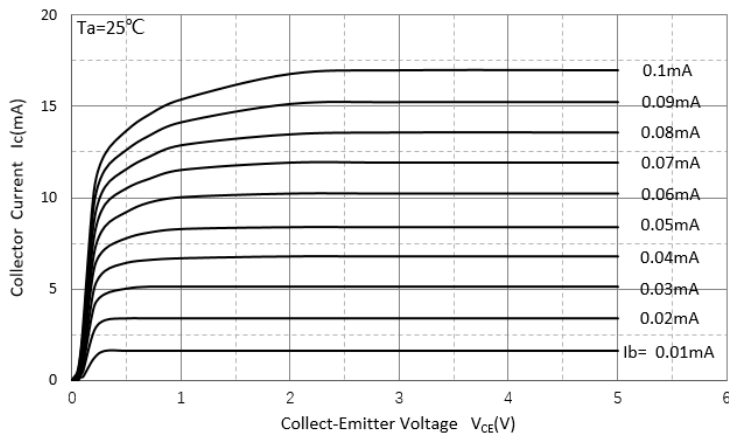
■Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMST5551	F2	Approximate 0.005	3000	30000	120000	7" reel

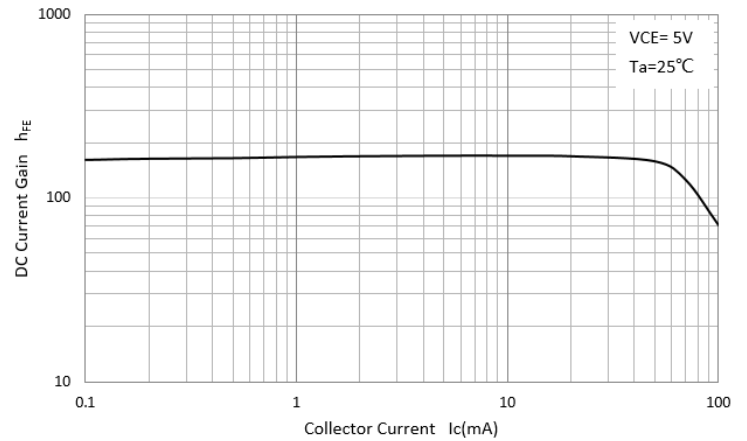


■ Characteristics(Typical)

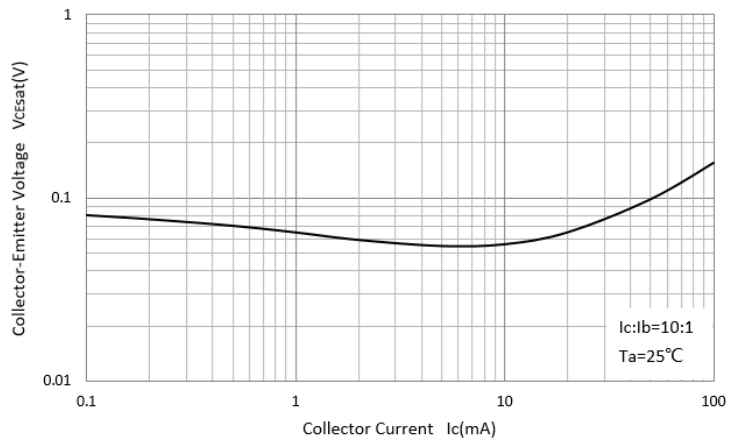
Static Characteristic



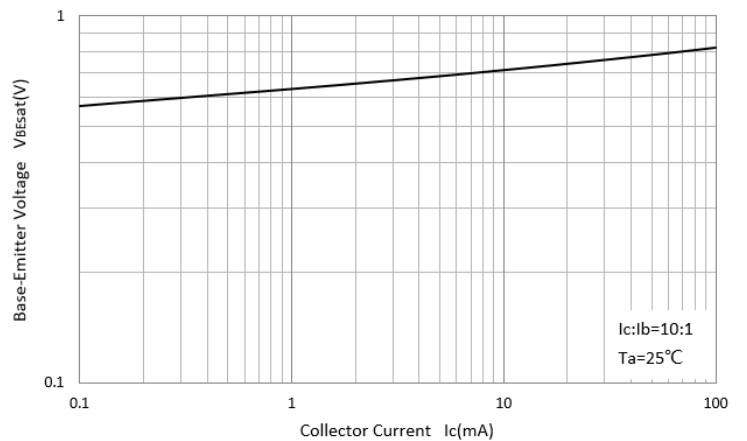
DC Current Gain



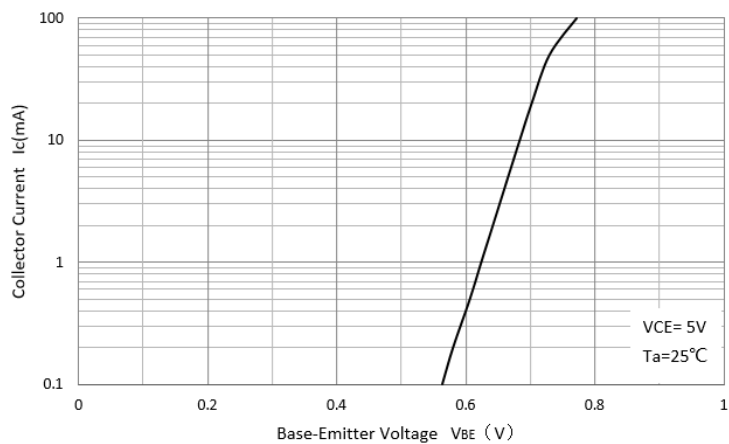
Collector-Emittor Saturation Voltage



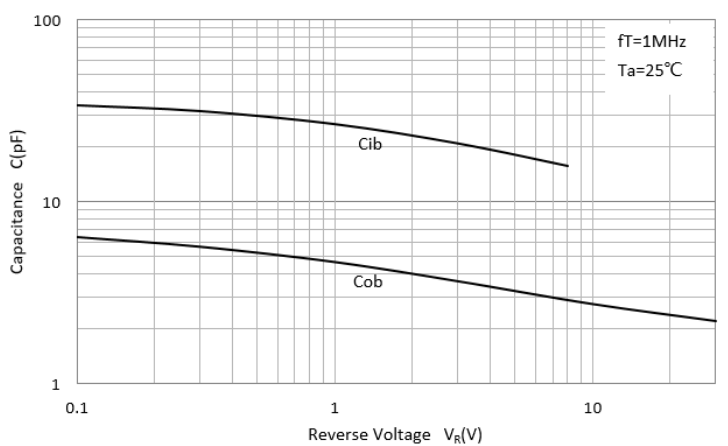
Base-Emittor Saturation Voltage



Base-Emittor On Voltage



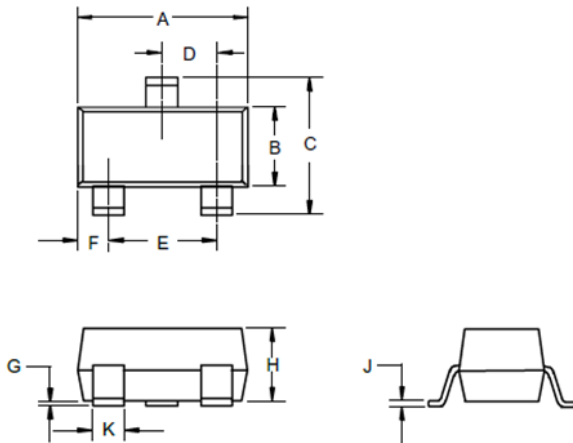
$C_{ob}/C_{ib}-V_{CB}/V_{EB}$





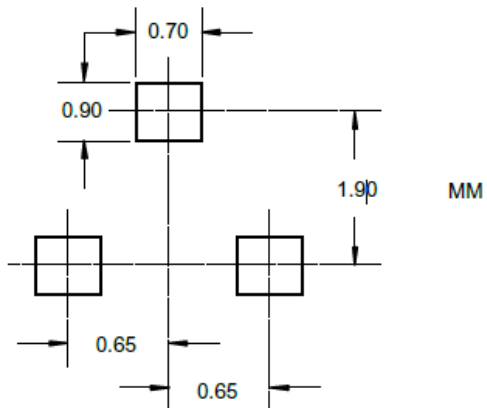
MMST5551

■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





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