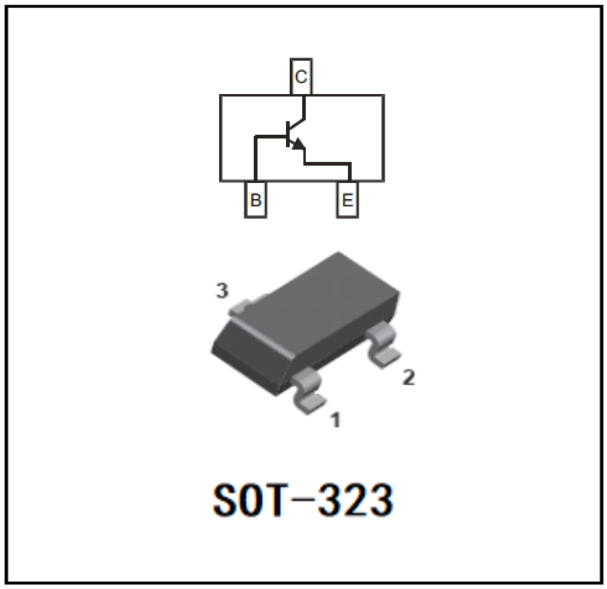
NPN General Purpose Amplifier



Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: K3X

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

Item	Symbol	Unit	Conditions	Value
Collector-Base Voltage	VCBO	V		60
Collector-Emitter Voltage	VCEO	V		40
Emitter-Base Voltage	VEBO	V		6
Collector Current -Continuous	IC	mA		600
Total Device Dissipation	PD	mW		200
Junction Temperature	Tj	℃		150
Storage Temperature	TSTG	℃		-55 to +150

■ Ordering Information (Example)

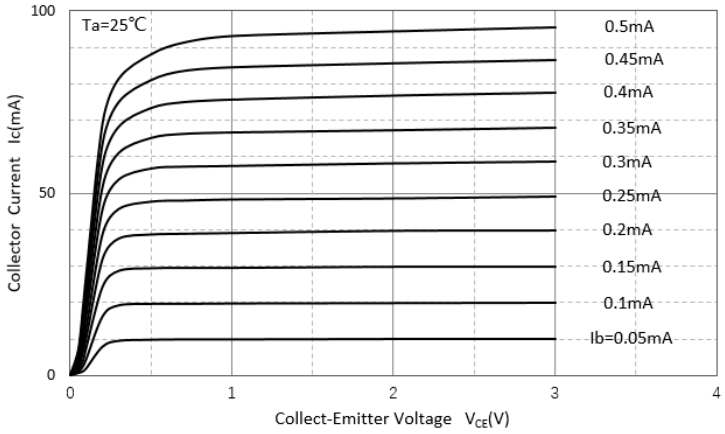
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMST4401	F2	Approximate 0.005	3000	30000	120000	7” reel

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

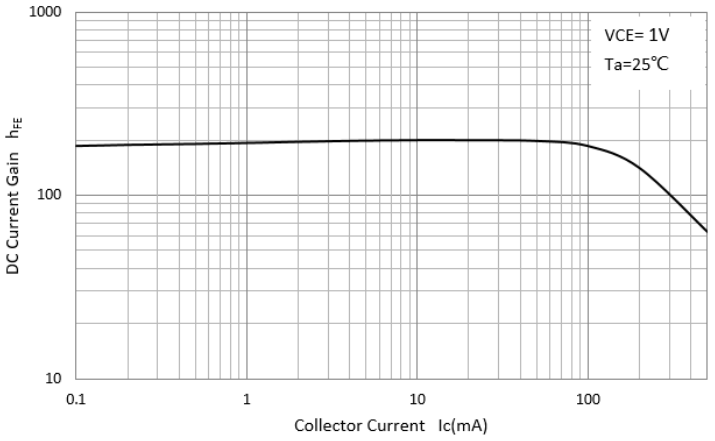
Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	IC=10mA,IE=0	60		
Collector-emitter breakdown voltage	$V_{(BR)CEO*}$	V	IC =1mA,IB=0	40		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	V	IE=100μA,IC=0	6		
Collector-emitter cut-off current	I_{CEO}	nA	VCE=35V,IB=0			100
Collector-base cut-off current	I_{CBO}	nA	VCB=35V, IE =0			100
Emitter-base cut-off current	I_{EBO}	nA	VEB=5 V, IC =0			100
DC current gain	h_{FE}		VCE=1V,IC=150mA	100		300
			VCE=2V,IC=500mA	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	IC=150mA,IB=15mA			0.4
Base-emitter saturation voltage	$V_{BE(sat)}$	V	IC=150mA,IB=15mA			0.95
Transition frequency	f_T	MHz	VCE=10V,IC=20mA,f=100MHz	250		
Delay time	td	ns	VCC=30V, VBE(off)=0.2V IC=150uA,IB1=15mA			15
Rise time	tr	ns				20
Storage time	ts	ns	VCC=30V,IC=150mA,IB1=IB2=15mA			225
Fall time	tf	ns				60
Output Capacitance	Cob	pF	VCB=10V,IE=0，f=1MHz			6.5

■ **Characteristics** (Typical)

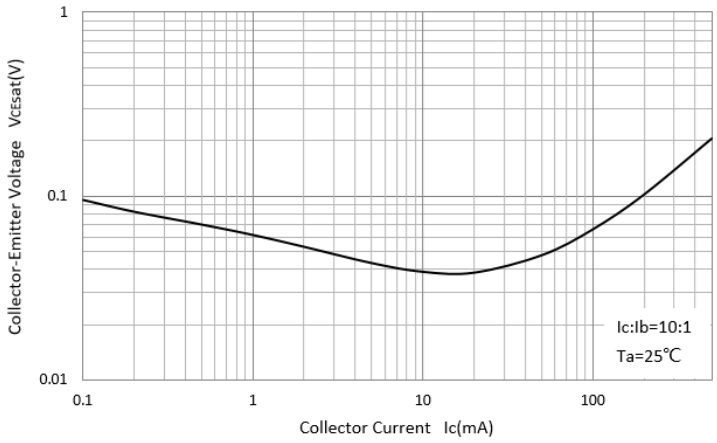
Static Characteristic



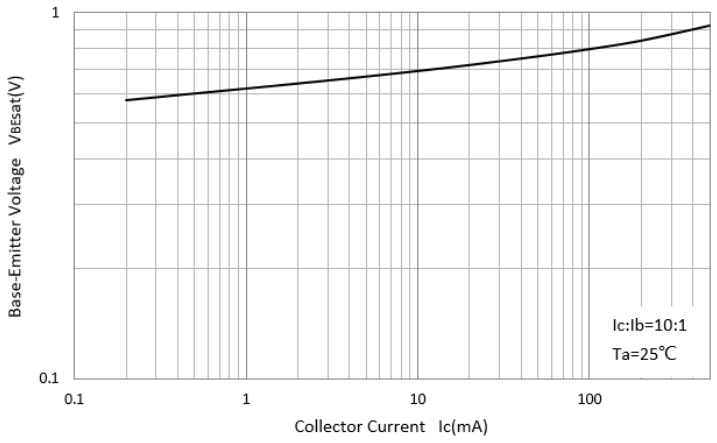
DC Current Gain



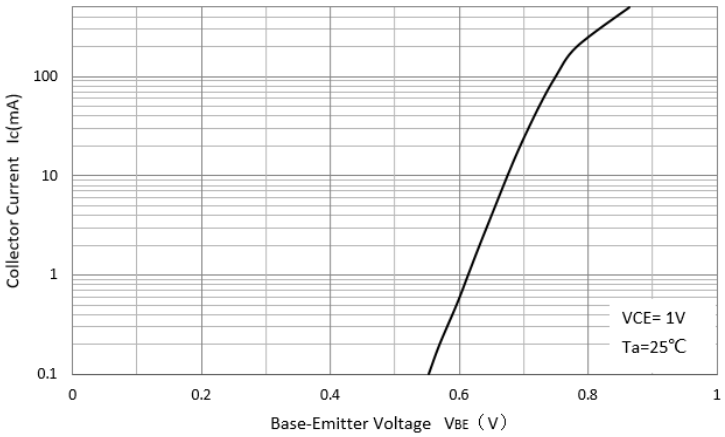
Collector-Emitter Saturation Voltage



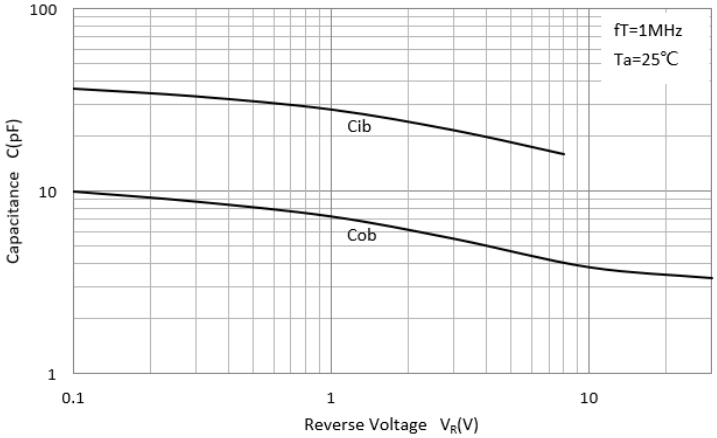
Base-Emitter Saturation Voltage



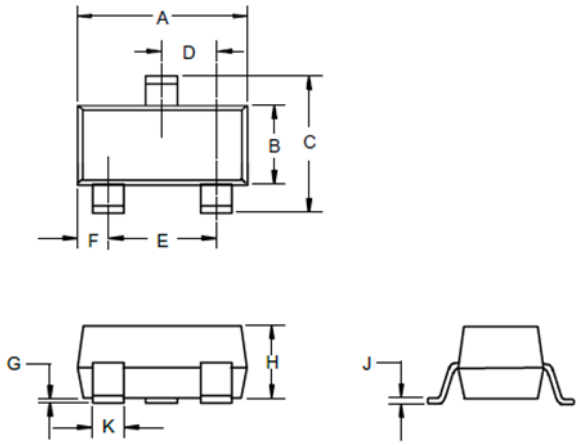
Base-Emitter On Voltage



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

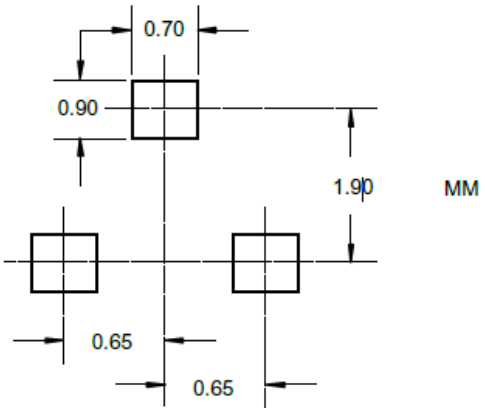


■SOT-323 Package Outline Dimensions



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 Suggested Pad Layout



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