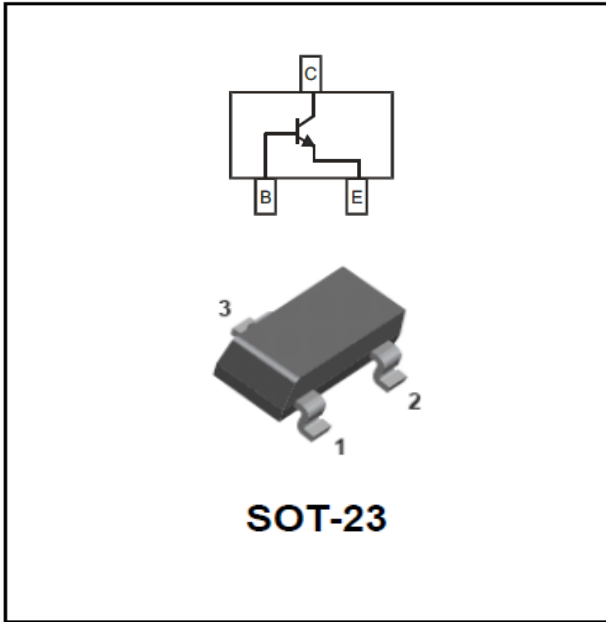


NPN General Purpose Amplifier



Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Marking:G1

■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
Power Dissipation	P_D	mW		300
Operation Junction Temperature	T_J	°C		-55 to +150
Storage Temperature	T_{STG}	°C		-55 to +150



MMBT5551

■Electrical Characteristics (Ta=25°C)

Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Voltage*	V_{CE0}	V	$I_C=1.0mA, I_B=0$	160	
Collector-Base Voltage	V_{CB0}	V	$I_C=100\mu A, I_E=0$	180	
Emitter-Base Voltage	V_{EB0}	V	$I_E=10\mu A, I_C=0$	6.0	
Collector Cutoff Current	I_{CB0}	nA	$V_{CB}=120Vdc$		50
Collector Cutoff Current	I_{EB0}	nA	$V_{CE}=4.0Vdc$		50
DC Current Gain	h_{FE}		$I_C=1.0mA, V_{CE}=5.0Vdc$	80	
			$I_C=10mA, V_{CE}=5.0Vdc$	100	300
			$I_C=50mA, V_{CE}=5.0Vdc$	50	
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

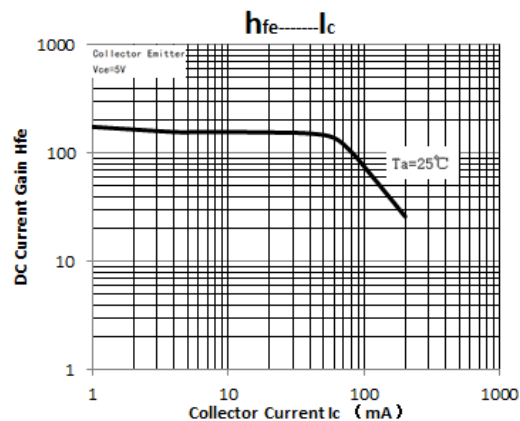
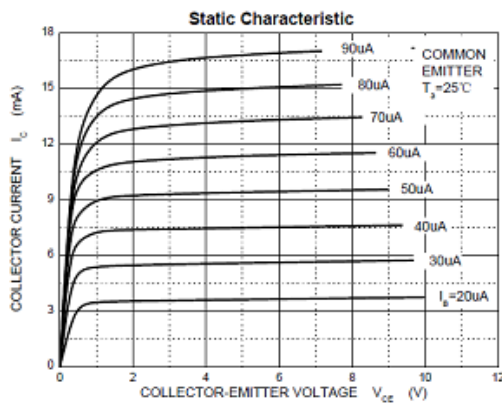
■Small-signal Characteristics (Ta=25°C)

Item	Symbol	Unit	Conditions	Min	Max
Current Gain-Bandwidth Product	f_T	MHz	$I_C=10mA, V_{CE}=5.0Vdc, f=30MHz$	100	300

■Ordering Information (Example)

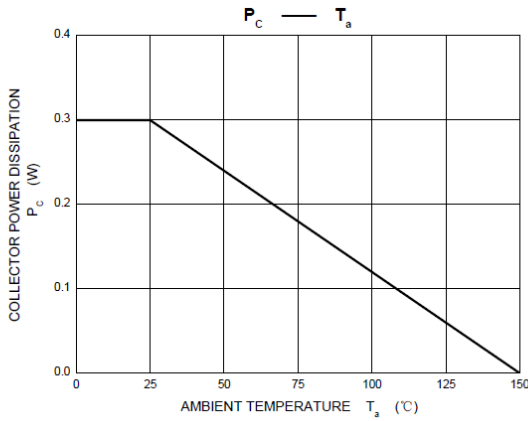
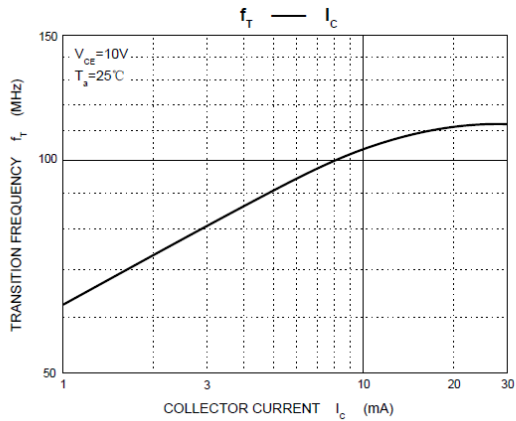
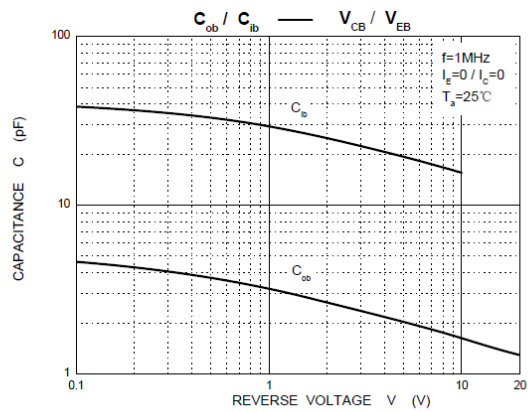
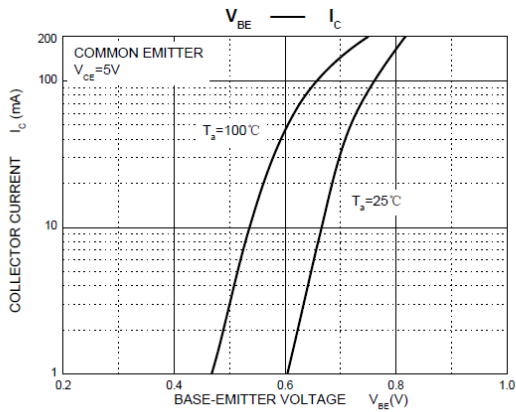
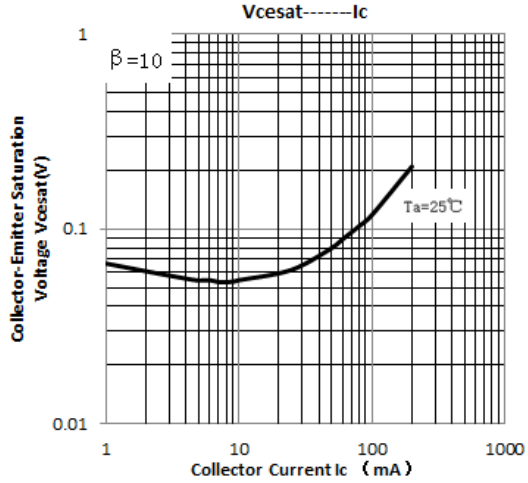
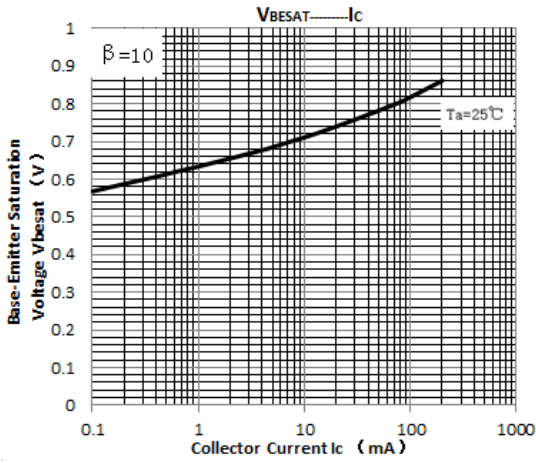
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMBT5551	F2	Approximate 0.008	3000	30000	120000	7" reel

■Characteristics(Typical)





MMBT5551





MMBT5551

■SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

■SOT-23Suggested Pad Layout





MMBT5551

Disclaimer

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