

AT-MMBT5551

NPN TRANSISTOR

FEATURES

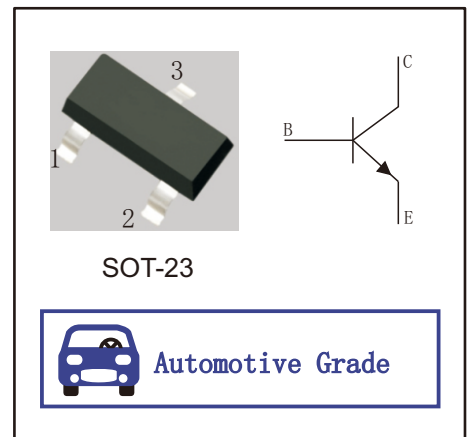
- Complementary to AT-MMBT5401
- Ideal for Medium Power Amplification and Switching
- Qualified to AEC-Q101 Standards for High Reliability

PINNING

PIN	SYMBOL	DESCRIPTION
1	B	BASE
2	E	EMITTER
3	C	COLLECTOR

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	180	V
Collector-Emitter Voltage	V _{CEO}	160	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current — Continuous	I _C	600	mA
Collector Power Dissipation	P _C	300	mW
Thermal Resistance From Junction To Ambient	R _{thJA}	416	°C/W
Operation Junction and Storage Temperature Range	T _J , T _{stg}	-55~+150	°C



CLASSIFICATION OF h_{FE}

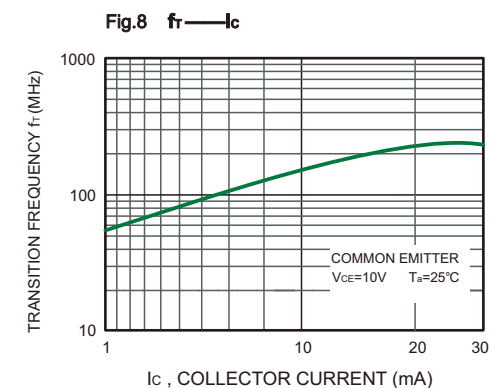
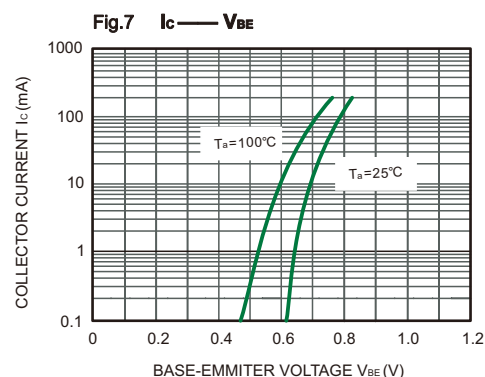
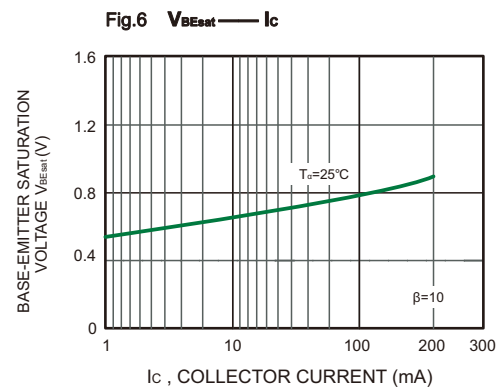
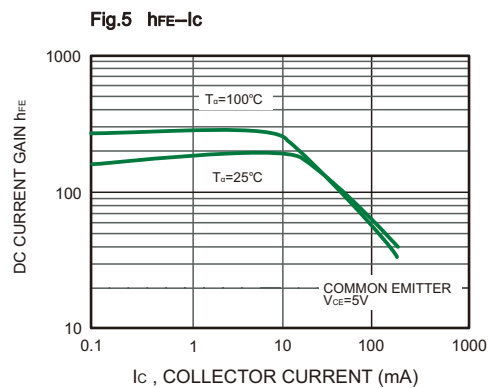
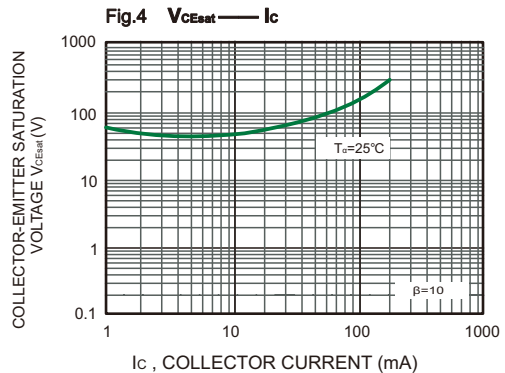
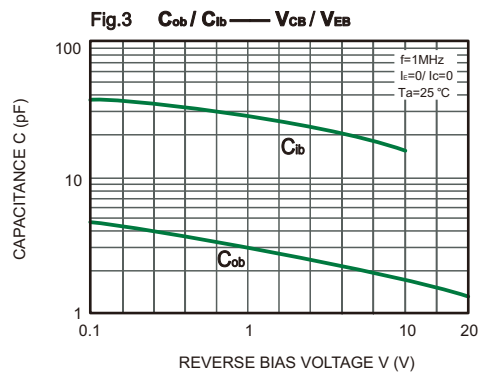
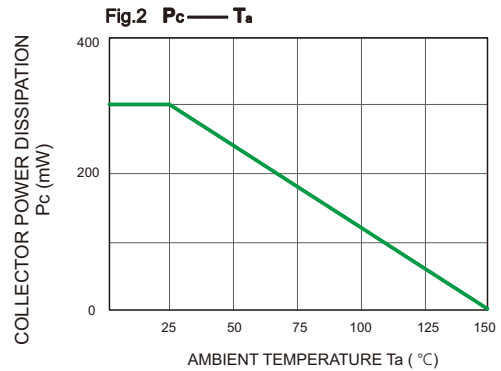
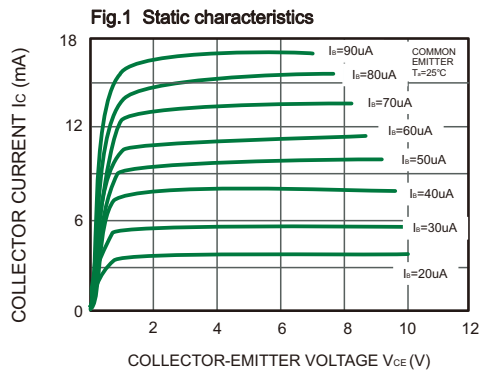
Rank	L	H
Range	100-200	200-300

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 100μA, I _E = 0	180			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 1 mA, I _B = 0	160			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	6			V
Collector cut-off current	I _{CBO}	V _{CB} = 120V, I _E = 0			50	nA
Emitter cut-off current	I _{EBO}	V _{EB} = 4V, I _C = 0			50	nA
DC current gain	h _{FE1}	V _{CE} = 5V, I _C = 1mA	80			
	h _{FE2}	V _{CE} = 5V, I _C = 10mA	100		300	
	h _{FE3}	V _{CE} = 5V, I _C = 50mA	50			
Collector-emitter saturation voltage	V _{CE(sat)1}	I _C = 10mA, I _B = 1mA			0.2	V
	V _{CE(sat)2}	I _C = 50mA, I _B = 5mA			0.5	V
Base-emitter saturation voltage	V _{BE(sat)1}	I _C = 10mA, I _B = 1mA			1	V
	V _{BE(sat)2}	I _C = 50mA, I _B = 5mA			1	V
Transition frequency	f _T	V _{CE} = 10V, I _C = 10mA, f=100MHz	100		300	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f=1MHz			6	pF

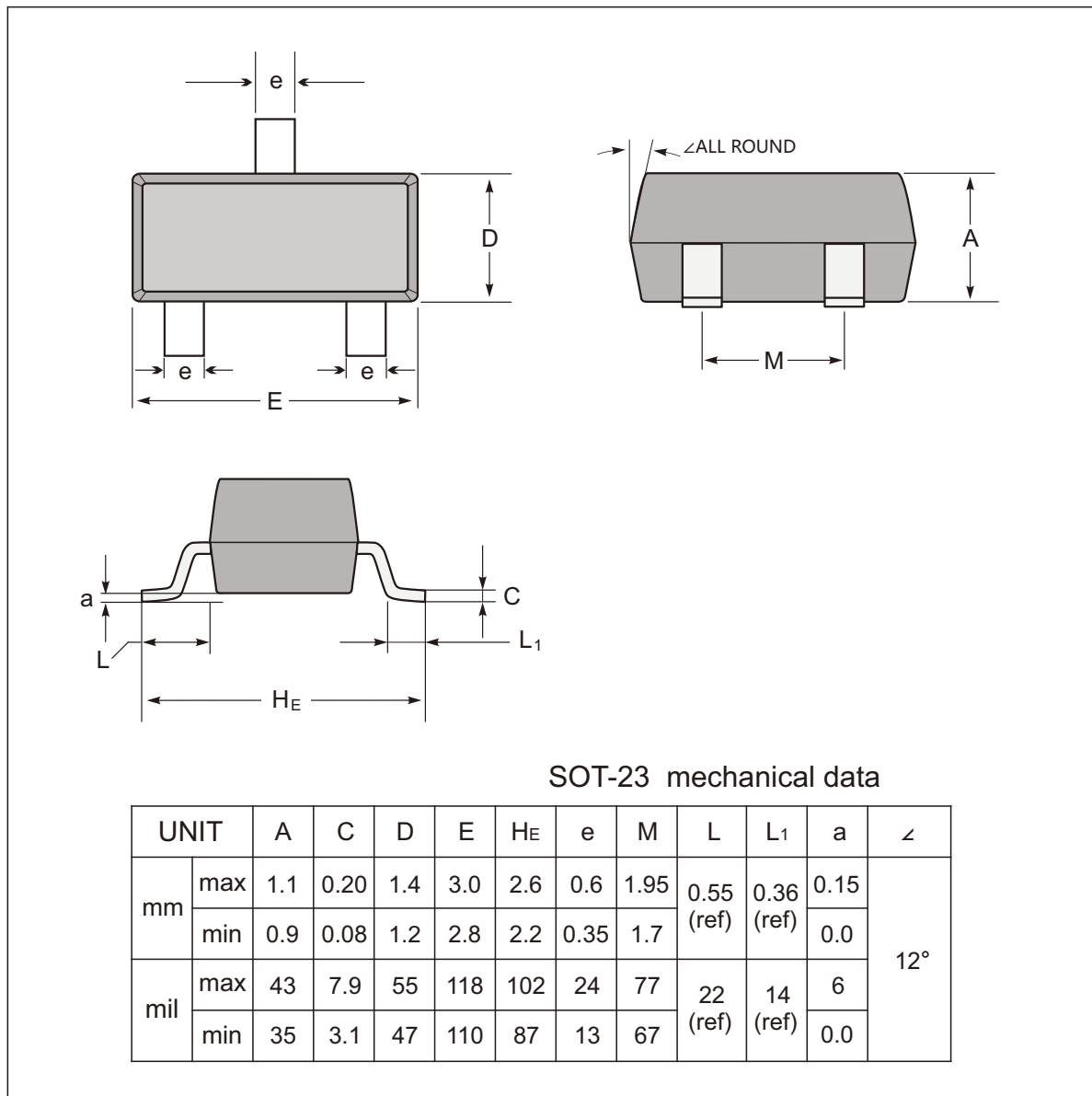


TYPICAL CHARACTERISTICS

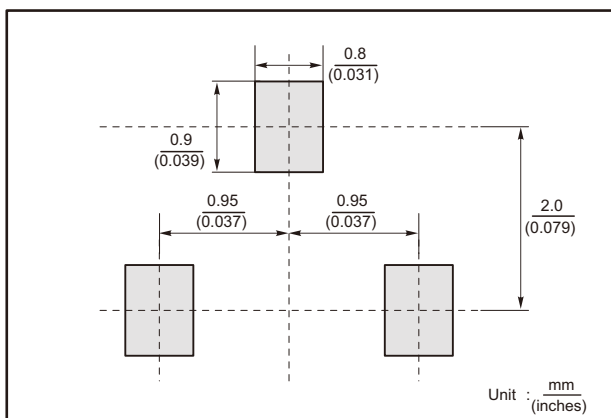




SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
AT-MMBT5551	G1