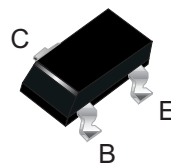


FEATURES

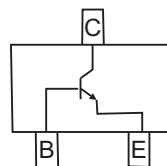
- Epoxy meets UL-94 V-0 flammability rating
- Complementary to MMBT5401
- Power dissipation of 300mW
- High stability and high Reliability

SOT-23



MECHANICAL DATA

- Case: SOT-23(TO-236)
- Terminals: Plated solderable per MIL-STD-750, method 2026
- Mounting Position: Any
- Marking: G1



MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Collector-Emitter Voltage	V_{CE0}	V	160
Collector-Base Voltage	V_{CB0}	V	180
Emitter-Base Voltage	V_{EB0}	V	6
Collector Current-Continuous	I_C	mA	600
Collector Power Dissipation	P_D	mW	300
Operation Junction temperature	T_J	$^{\circ}\text{C}$	-55 to +150
Storage Temperature	T_{STG}	$^{\circ}\text{C}$	-55 to +150

MMBT5551

ELECTRICAL CHARACTERISTICS($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	V	$I_C=1.0\text{mA}, I_B=0$	160	---
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	V	$I_C=100\mu\text{A}, I_E=0$	180	---
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	V	$I_E=10\mu\text{A}, I_C=0$	6.0	---
Collector cut-off Current	I_{CBO}	nA	$V_{CB}=120\text{V}, I_E=0$	---	50
Emitter cut-off Current	I_{EBO}	nA	$V_{EB}=4\text{V}, I_C=0$	---	50
DC Current Gain	$h_{FE(1)}$		$I_C=1\text{mA}, V_{CE}=5.0\text{V}$	80	---
	$h_{FE(2)}$		$I_C=10\text{mA}, V_{CE}=5.0\text{V}$	100	300
	$h_{FE(3)}$		$I_C=50\text{mA}, V_{CE}=5.0\text{V}$	30	---
Collector-Emitter Saturation Voltage	$V_{CE(set)}$	V	$I_C=10\text{mA}, I_B=1.0\text{mA}$	---	0.15
			$I_C=50\text{mA}, I_B=5.0\text{mA}$	---	0.2
Base-Emitter Saturation Voltage	$V_{BE(set)}$	V	$I_C=10\text{mA}, I_B=1.0\text{mA}$	---	1.0
			$I_C=50\text{mA}, I_B=5.0\text{mA}$	---	1.0
Output Capacitance	C_{ob}	pF	$V_{CB}=10\text{V}, f=1.0\text{MHz}, I_E=0$	---	6.0
Current Gain-Bandwidth Product	f_T	MHZ	$I_C=10\text{mA}, V_{CE}=10\text{V}$ $f=100\text{MHz}$	100	300

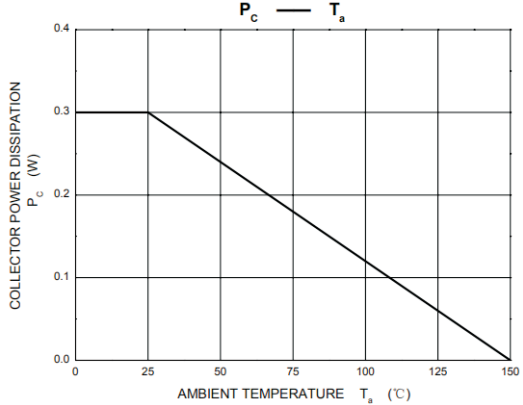
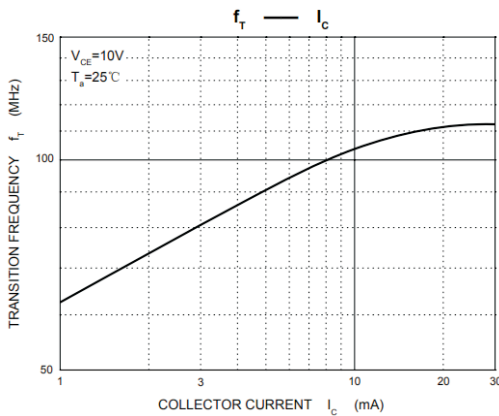
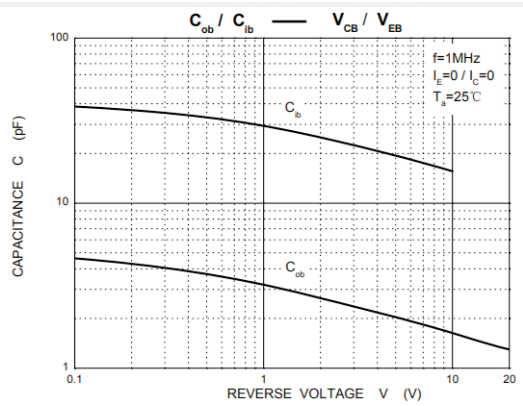
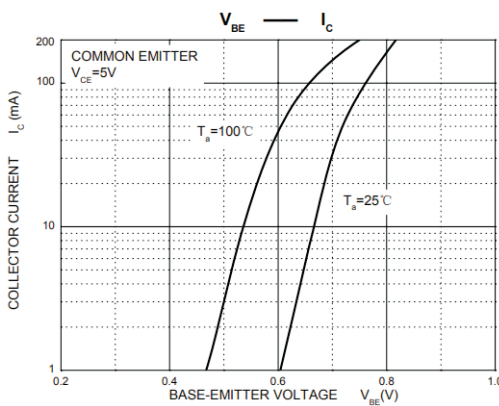
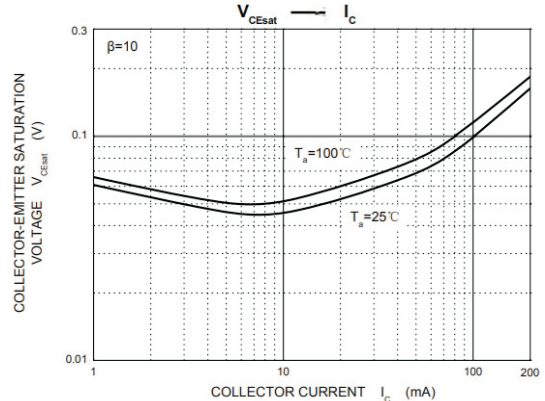
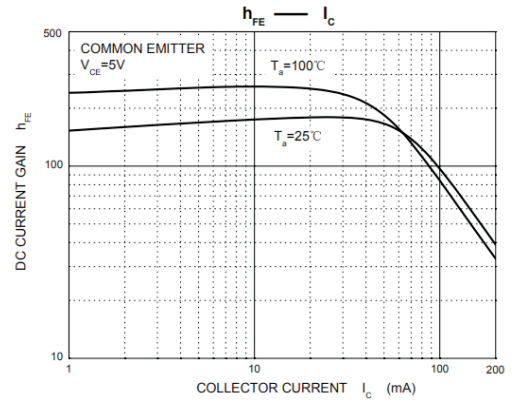
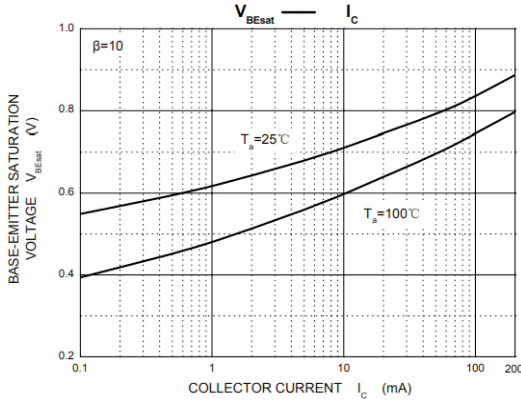
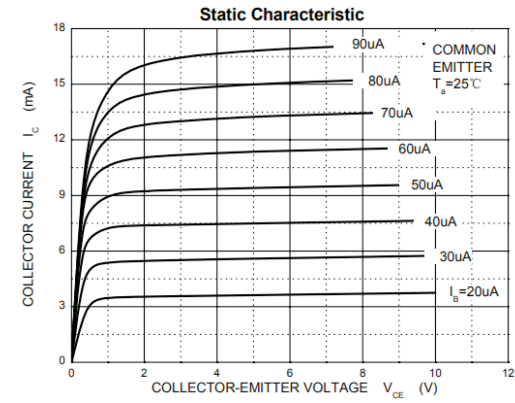
CLASSIFICATION OF $h_{FE(2)}$

h_{FE}	100-300	
Rank	L	H
Range	100-200	200-300

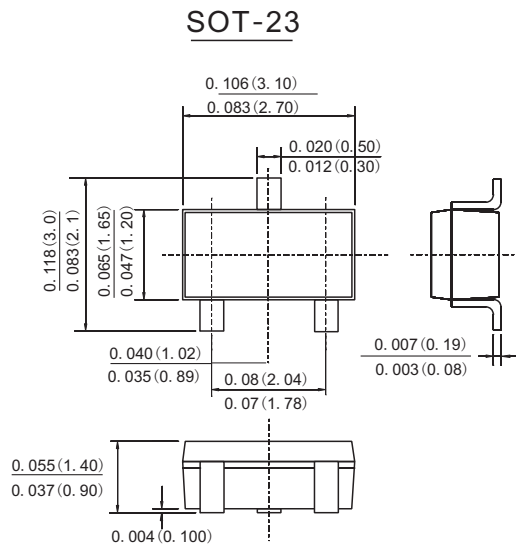
AVAILABLE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (Pcs/reel)	Quantity (pcs/box)	Quantity (pcs/carton)
MMBT5551	T/R	$\Phi 180$	3K	30K	120K

Characteristics(Typical)

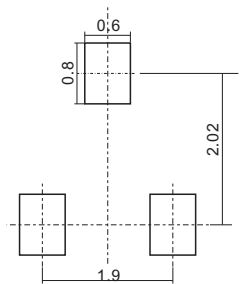


Outline Dimensions



Dimensions in inches and (millimeters)

Suggested pad layout



Dimensions in millimeters

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