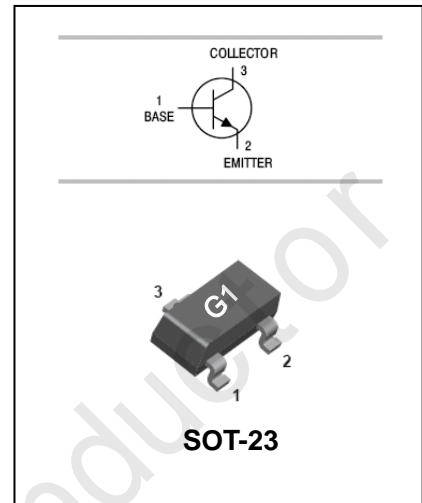


## FEATURES

- Epitaxial planar die construction.
- Complementary PNP type available (MMBT5401).
- Also available in lead free version.

## APPLICATIONS

- Ideal for medium power amplification and switching.

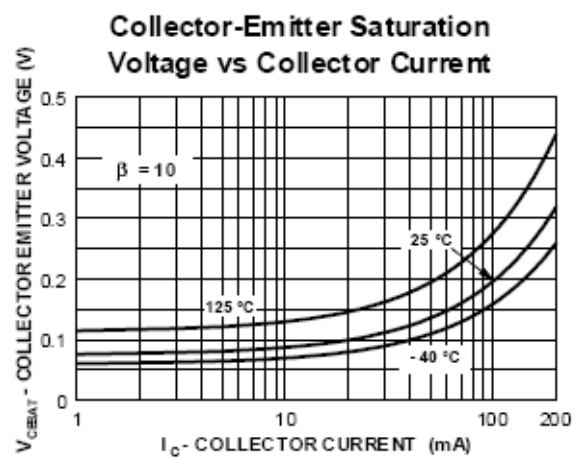
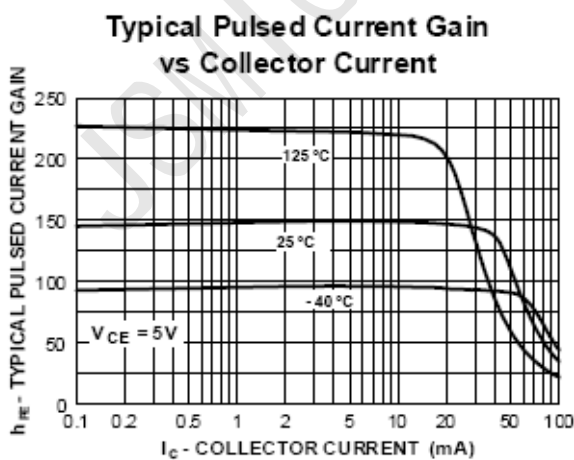


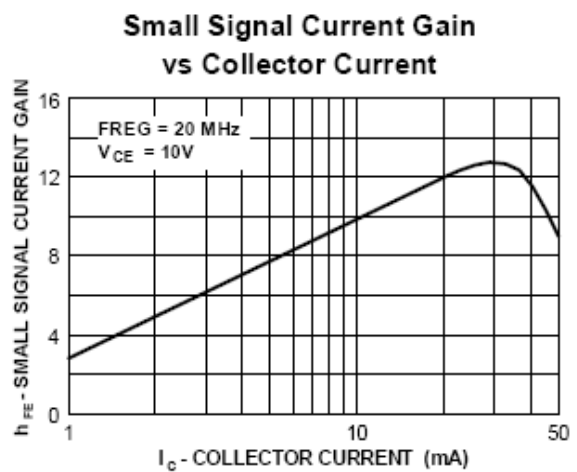
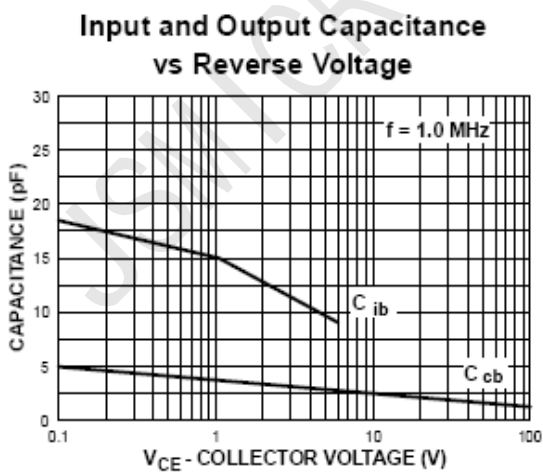
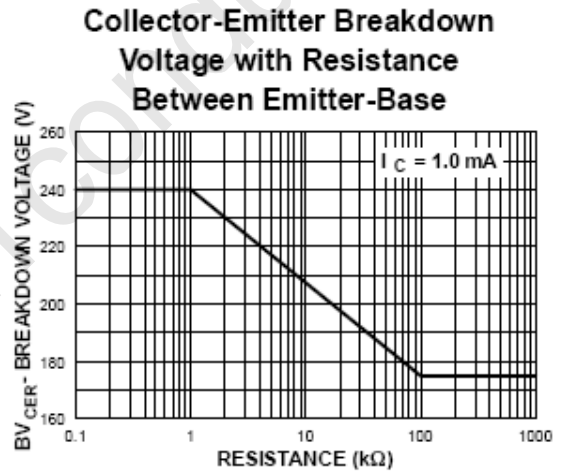
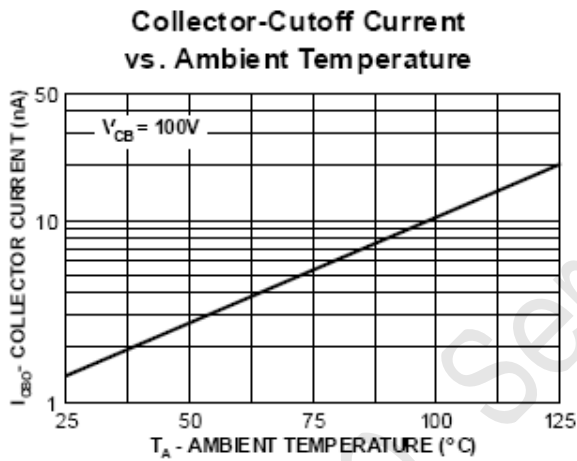
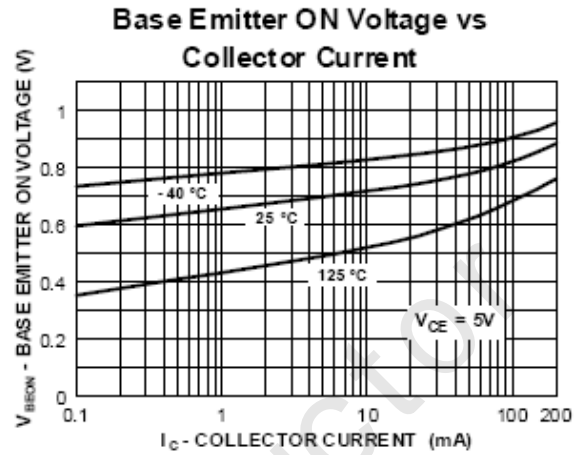
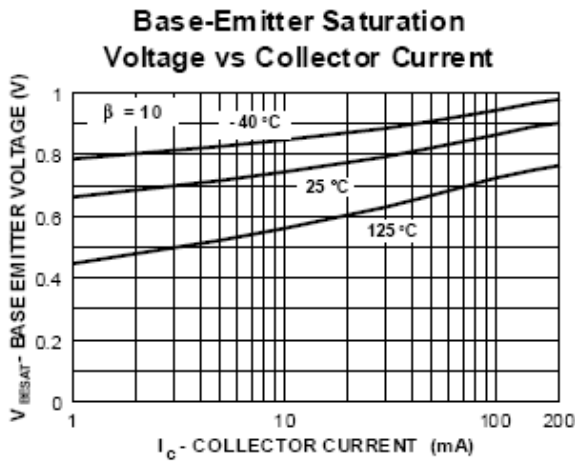
## MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	UNIT
$V_{CBO}$	collector-base voltage	180	V
$V_{CEO}$	collector-emitter voltage	160	V
$V_{EBO}$	emitter-base voltage	6	V
$I_C$	collector current (DC)	0.6	A
$P_C$	Collector dissipation	0.35	W
$R_{\theta JA}$	Thermal resistance, Junction to ambient	357	°C/W
$T_j, T_{stg}$	junction and storage temperature	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Symbol	Parameter	Test conditions	MIN.	MAX.	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu A, I_E=0$	180		
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=0.1mA, I_B=0$	160		
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\mu A, I_C=0$	6		
$I_{CBO}$	collector cut-off current	$I_E = 0; V_{CB} = 120V$	-	50	nA
$I_{EBO}$	emitter cut-off current	$I_C = 0; V_{EB} = 4V$	-	50	nA
$h_{FE}$	DC current gain	$V_{CE} = 5V; I_C = 1mA$ $V_{CE} = 5V; I_C = 10mA$ $V_{CE} = 5V; I_C = 50mA$	80 100 30	- 300 -	
$V_{CE(sat)}$	collector-emitter saturation voltage	$I_C = 10mA; I_B=1mA$ $I_C = 50mA; I_B = 5mA$	-	0.15 0.2	V
$V_{BE(sat)}$	base-emitter saturation voltage	$I_C=10mA; I_B=1mA$ $I_C=50mA; I_B=5mA$	-	1 1	V
$f_T$	transition frequency	$I_C=10mA; V_{CB}=10V;$ $f=100MHz$	100	300	MHz
$C_{obo}$	Output capacitance	$I_E=10mA; V_{CE} = 10V;$ $f=1.0MHz$		6.0	pF

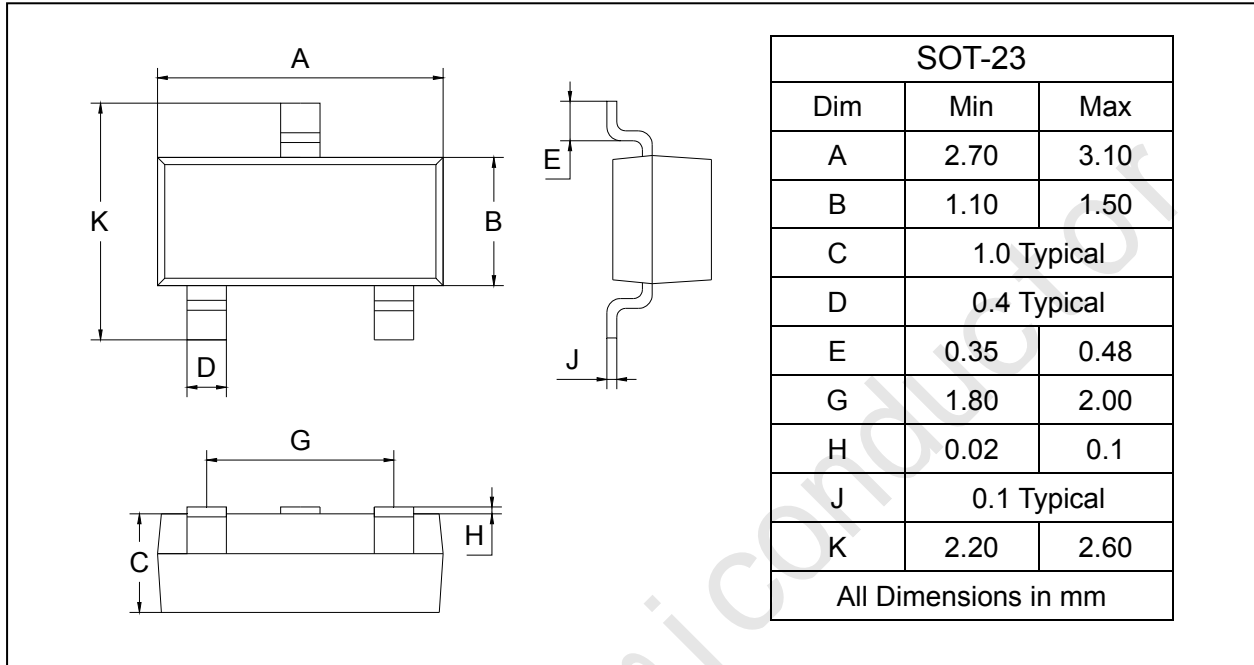
**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**




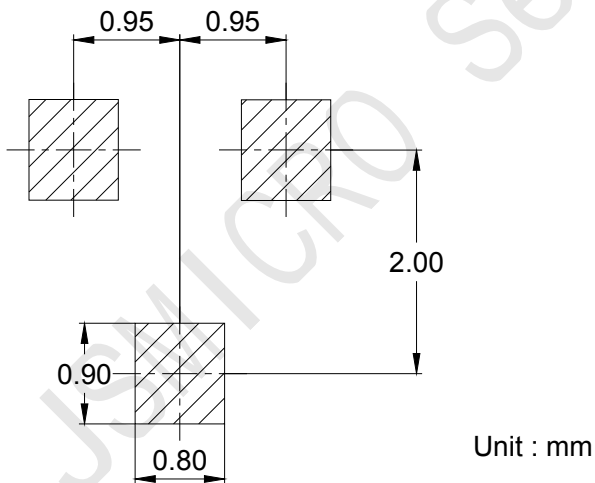
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

Device	Package	Shipping
MMBT5551	SOT-23	3000/Tape&Reel