

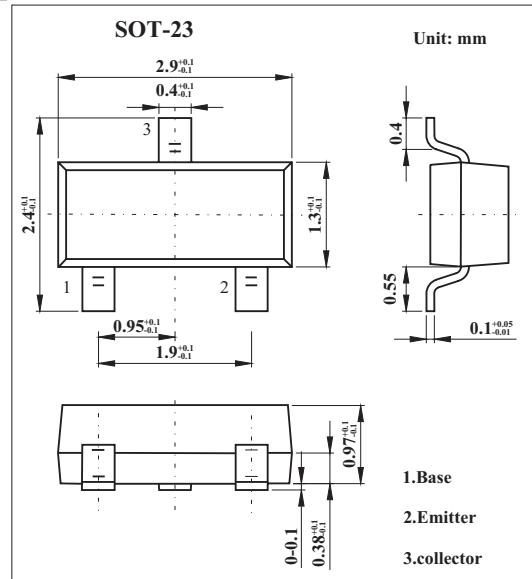
## SOT-23 Plastic-Encapsulate Transistors

### FEATURES

- Epitaxial planar die construction.
- Complementary NPN type available (MMBT4401).
- Also available in lead free version.
- Ideal for medium power amplification and switching.
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- PNP General Purpose Transistor

### MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	UNIT
V <sub>CBO</sub>	collector-base voltage	-40	V
V <sub>CEO</sub>	collector-emitter voltage	-40	V
V <sub>EBO</sub>	emitter-base voltage	-5	V
I <sub>C</sub>	collector current (DC)	-0.6	A
P <sub>c</sub>	Collector dissipation	0.35	W
R <sub>JA</sub>	Thermal Resistance,Junction to Ambient	357	°C/W
T <sub>j</sub> , T <sub>stg</sub>	junction and storage temperature	-55 to +150	°C

#### PACKAGE INFORMATION

Device	Package	Shipping
MMBT4403	SOT-23	3000/Tape&Reel

Symbol	Parameter	Test conditions	MIN.	MAX.	UNIT
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-100μA,I <sub>E</sub> =0	-40		
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-1mA,I <sub>B</sub> =0	-40		
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-100μA,I <sub>C</sub> =0	-5		
I <sub>CEX</sub>	collector cut-off current	V <sub>CE</sub> =-35V,V <sub>BE</sub> =0.4V		-0.1	μA
I <sub>BL</sub>	Base cut-off current	V <sub>CE</sub> =-35V,V <sub>BE</sub> =-0.4V		-0.1	μA
h <sub>FE</sub>	DC current gain	V <sub>CE</sub> = -1V; I <sub>C</sub> = -0.1mA	30		
		V <sub>CE</sub> = -1V; I <sub>C</sub> = -1mA	60		
		V <sub>CE</sub> = -1V; I <sub>C</sub> = -10mA	100		
		V <sub>CE</sub> = -2V; I <sub>C</sub> = -150mA	100	300	
		V <sub>CE</sub> = -2V; I <sub>C</sub> = -500mA	20		
V <sub>CE(sat)</sub>	collector-emitter saturation voltage	I <sub>C</sub> = -150mA ,I <sub>B</sub> = -15mA I <sub>C</sub> = -500mA ,I <sub>B</sub> = -50mA	-	-0.4 -0.75	V
V <sub>BE(sat)</sub>	base-emitter saturation voltage	I <sub>C</sub> = -150mA; I <sub>B</sub> = -15mA I <sub>C</sub> = -500mA; I <sub>B</sub> = -50mA	-0.75	-0.95 -1.3	V
f <sub>T</sub>	transition frequency	I <sub>C</sub> = -20mA; V <sub>CE</sub> = -10V; f =100MHz	200	-	MHz

#### Marking

Marking	2T
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# RATINGS AND CHARACTERISTIC CURVES

