

SOT-23 Plastic-Encapsulate Transistors

Features

- **Power dissipation**

$$P_{CM} : 0.3 \text{ W (Tamb=25}^\circ\text{C)}$$

- **Collector current**

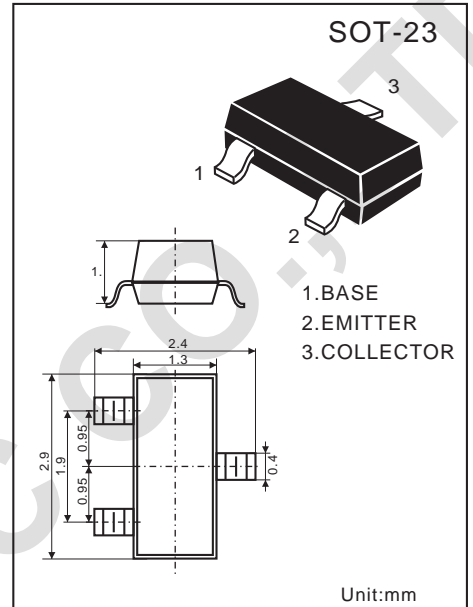
$$I_{CM} : -0.6\text{A}$$

- **Collector-base Voltage**

$$V_{(BR)CBO} : -160\text{V}$$

- **Operating and storage junction temperature range**

$$T_j, T_{stg} : -55^\circ\text{C to } +150^\circ\text{C}$$



Electrical Characteristics

(Tamp=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-160			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-150			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_B = 0$	-5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -120\text{V}, I_E = 0$			-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0\text{mA}$			-0.1	μA
DC Current Gain	$H_{FE(1)}$	$V_{CE} = -5\text{V}, I_C = -1\text{mA}$	80			
	$H_{FE(2)}$	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$	100		200	
	$H_{FE(3)}$	$V_{CE} = -5\text{V}, I_C = -50\text{mA}$	50			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-1	V
Transition Frequency	f_T	$V_{CE} = -20\text{V}, I_C = -50\text{mA}, f = 100\text{MHz}$	100			MHz

Device Marking

MMBT5401LT1 = 2L

Typical Characteristics

