

SOT-23 Plastic-Encapsulate Transistors

Features

• Power dissipation

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

• Collector current

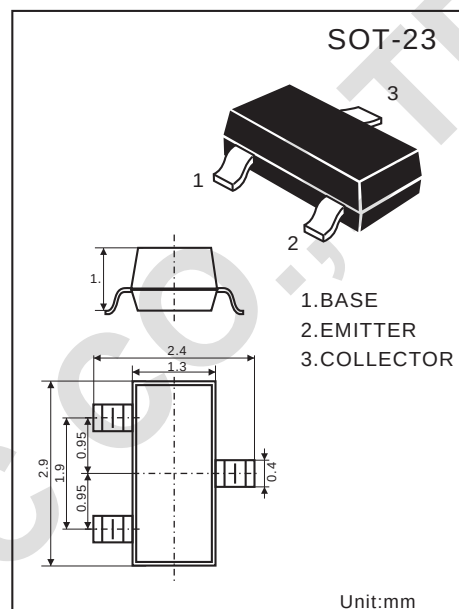
$$I_{CM} : -0.6 \text{ A}$$

• 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

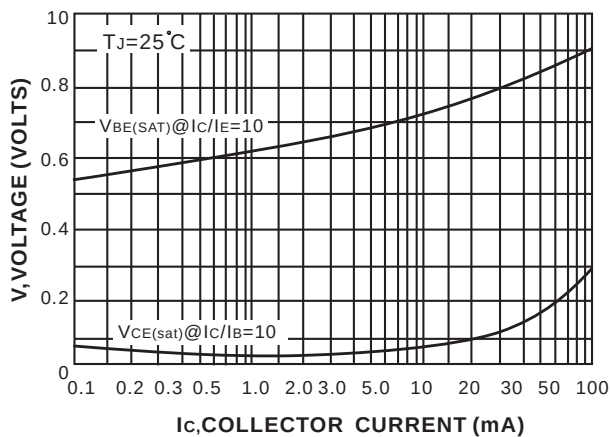
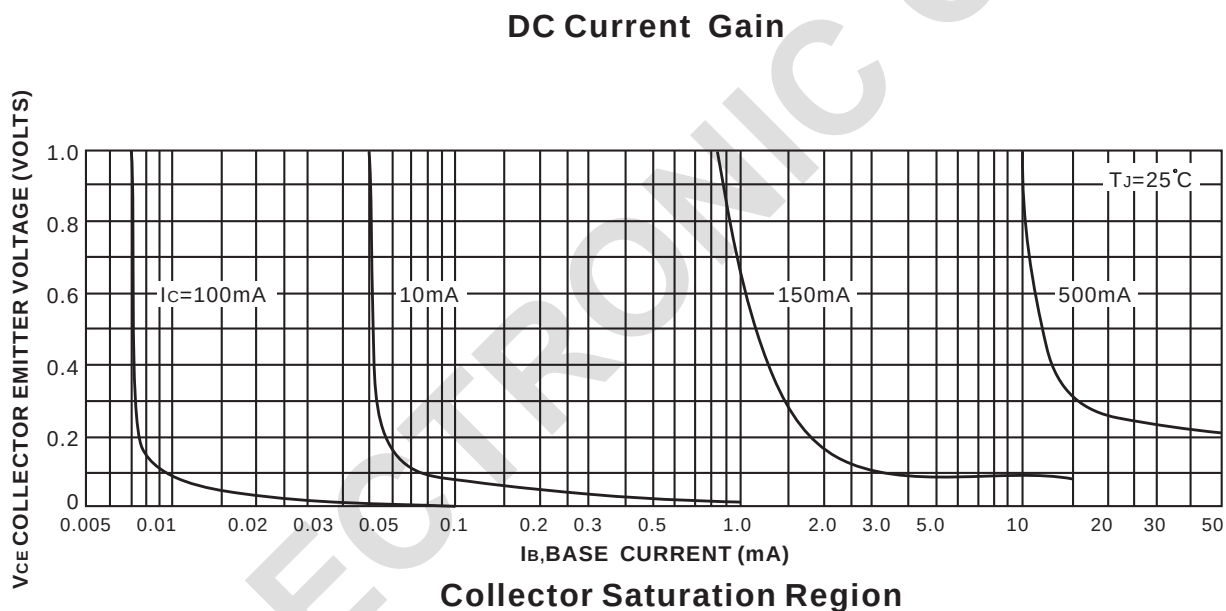
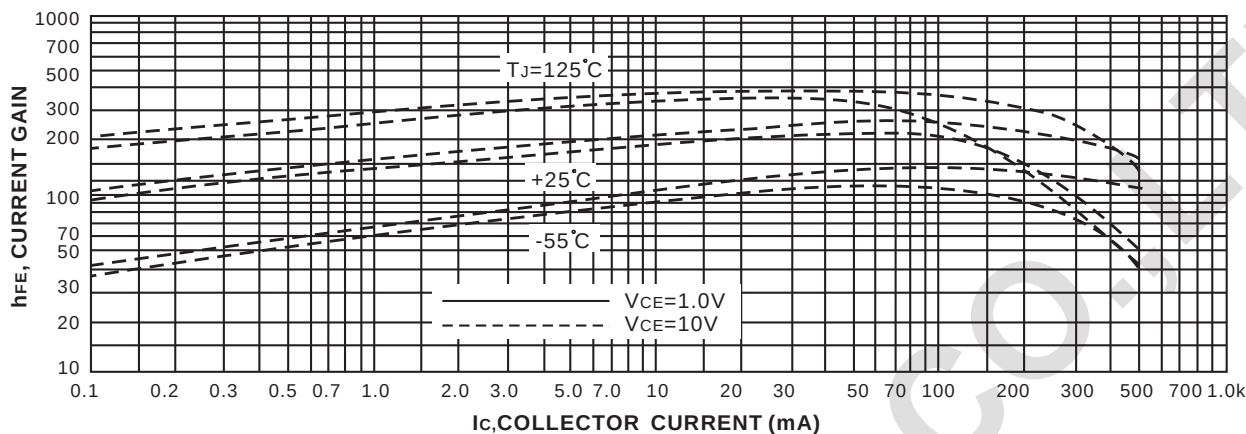
(Tamp=25°C unless otherwise specified)

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



“On” Voltages