



SOT-23 Plastic-Encapsulate Transistors

MMBT3906LT1 TRANSISTOR (PNP)

FEATURES

Power dissipation

$P_{CM} : 0.2 \text{ W (Tamb=25}^{\circ}\text{C)}$

Collector current

$I_{CM} : -0.2 \text{ A}$

Collector-base voltage

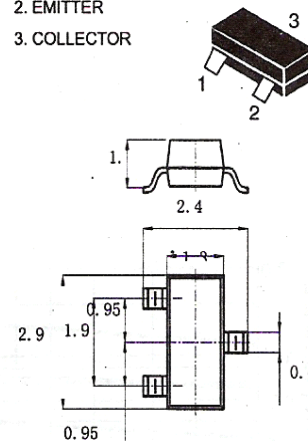
$V_{(BR)CBO} : -40 \text{ V}$

Operating and storage junction temperature range

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

SOT-23

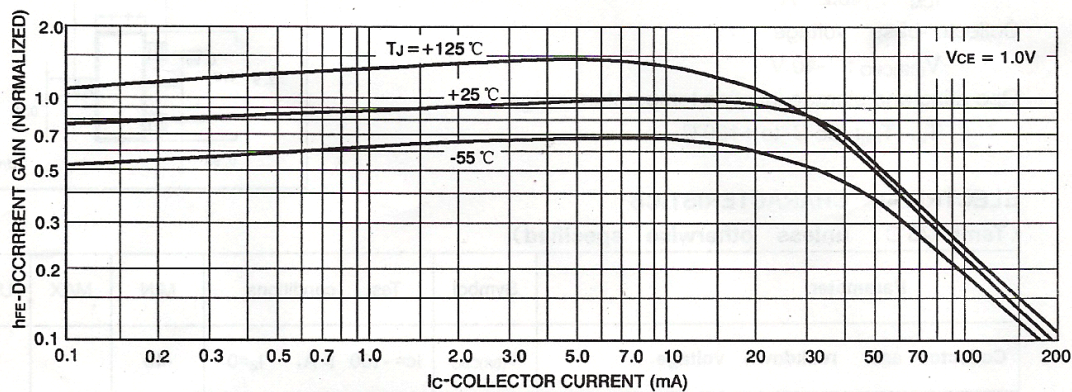
1. BASE
2. EMITTER
3. COLLECTOR



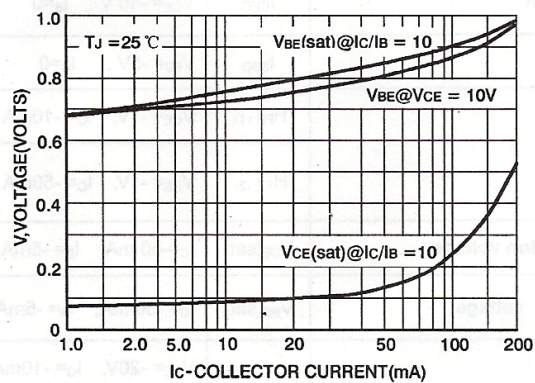
ELECTRICAL CHARACTERISTICS

(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu\text{A}, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu\text{A}, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -40 \text{ V}, I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -40 \text{ V}, I_B = 0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$		-0.1	μA
DC current gain	$H_{FE(1)}$	$V_{CE} = -1 \text{ V}, I_C = -10 \text{ mA}$	100	300	
	$H_{FE(2)}$	$V_{CE} = -1 \text{ V}, I_C = -50 \text{ mA}$	60		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50 \text{ mA}, I_B = -5 \text{ mA}$		-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50 \text{ mA}, I_B = -5 \text{ mA}$		-0.95	V
Transition frequency	f_T	$V_{CE} = -20 \text{ V}, I_C = -10 \text{ mA}$ $f = 100 \text{ MHz}$	250		MHz



DC Current Gain



"On" Voltages