

SOT-23-3L Plastic-Encapsulate Transistors

MMBTA94 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 0.35 \text{ W} \quad (T_{amb}=25^{\circ}\text{C})$$

Collector current

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

Collector-base voltage

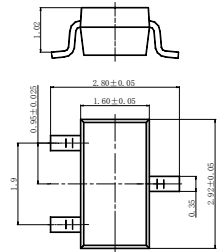
$$V_{(BR)CBO} : -400 \text{ V}$$

Operating and storage junction temperature range

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

SOT-23-3L

1. BASE
2. EMITTER
3. COLLECTOR

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu\text{A}, I_E = 0$	-400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-400			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}	$V_{CB} = -400 \text{ V}, I_E = 0$			-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -400 \text{ V}, I_B = 0$			-5	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4 \text{ V}, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -10 \text{ V}, I_C = -10 \text{ mA}$	80		300	
	$h_{FE(2)}$	$V_{CE} = -10 \text{ V}, I_C = -1 \text{ mA}$	70			
	$h_{FE(3)}$	$V_{CE} = -10 \text{ V}, I_C = -100 \text{ mA}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$			-0.2	V
	$V_{CE(sat)}$	$I_C = -50 \text{ mA}, I_B = -5 \text{ mA}$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$			-0.75	V
Transition frequency	f_T	$V_{CE} = -20 \text{ V}, I_C = -10 \text{ mA}$ $f = 30 \text{ MHz}$	50			MHz

MARKING:4D