

MMBTA44 TRANSISTOR (NPN)

FEATURES

Power dissipation

$$P_{CM}: 0.35 \text{ W (Tamb=25°C)}$$

Collector current

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

Collector-base voltage

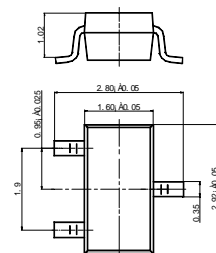
$$V_{(BR)CBO}: 400 \text{ V}$$

Operating and storage junction temperature range

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

SOT-23-3L

1. BASE
2. EMITTER
3. COLLECTOR



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, I_B = 0$	400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	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}	$V_{CE} = 400\text{V}$			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	3D
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