

MMBTA20**NPN EPITAXIAL SILICON TRANSISTOR****GENERAL PURPOSE TRANSISTOR****ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)**

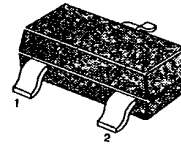
Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CE0}	40	V
Emitter-Base Voltage	V_{EB0}	4	V
Collector Current	I_C	100	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	T_{stg}	150	$^\circ\text{C}$

• Refer to MMBT3904 for graphs

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CE0}	$I_C = 1.0\text{mA}$, $I_B = 0$	40		V
Emitter-Base Breakdown Voltage	BV_{EB0}	$I_E = 100\mu\text{A}$, $I_C = 0$	4		V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 30\text{V}$, $I_E = 0$		100	nA
DC Current Gain	h_{FE}	$V_{CE} = 10\text{V}$, $I_C = 5\text{mA}$	40	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1.0\text{mA}$		0.25	V
Current Gain-Bandwidth Product	f_T	$I_C = 5.0\text{mA}$, $V_{CE} = 10\text{V}$ $f = 100\text{MHz}$	125		MHz
Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}$, $I_E = 0$ $f = 100\text{KHz}$		4	pF

SOT-23



1. Base 2. Emitter 3. Collector

Marking

