

**MMBTA20**

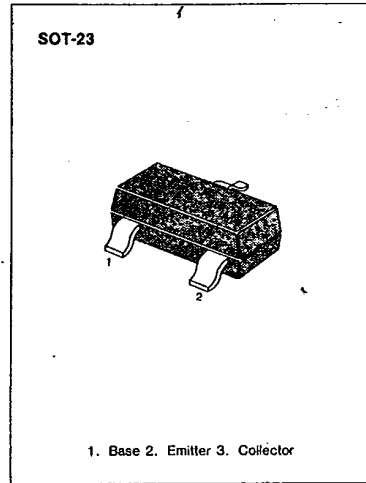
**NPN EPITAXIAL SILICON TRANSISTOR**

**GENERAL PURPOSE TRANSISTOR**

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub> = 25°C)**

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V <sub>CEO</sub>	40	V
Emitter-Base Voltage	V <sub>EBO</sub>	4	V
Collector Current	I <sub>C</sub>	100	mA
Collector Dissipation	P <sub>C</sub>	350	mW
Storage Temperature	T <sub>stg</sub>	150	°C

• Refer to MMBT3904 for graphs



**ELECTRICAL CHARACTERISTICS (T<sub>a</sub> = 25°C)**

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> = 1.0mA, I <sub>B</sub> = 0	40		V
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	I <sub>E</sub> = 100μA, I <sub>C</sub> = 0	4		V
Collector Cutoff Current	I <sub>CEO</sub>	V <sub>CB</sub> = 30V, I <sub>E</sub> = 0		100	nA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 5mA	40	400	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 10mA, I <sub>B</sub> = 1.0mA		0.25	V
Current Gain-Bandwidth Product	f <sub>T</sub>	I <sub>C</sub> = 5.0mA, V <sub>CE</sub> = 10V f = 100MHz	125		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0 f = 100KHz		4	pF

**Marking**

