

**MMBT5087**

**PNP EPITAXIAL SILICON TRANSISTOR**

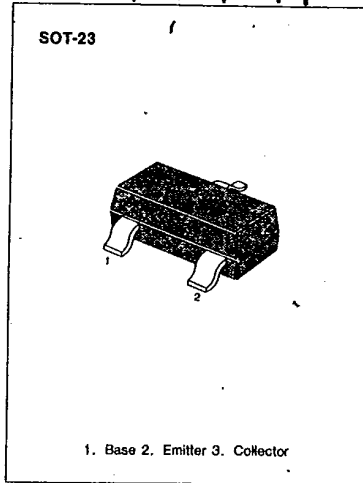
T-29-19

**LOW NOISE TRANSISTOR**

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	50	V
Collector-Emitter Voltage	V <sub>CEO</sub>	50	V
Emitter-Base Voltage	V <sub>EBO</sub>	3	V
Collector Current	I <sub>C</sub>	50	mA
Collector Dissipation	P <sub>C</sub>	350	mW
Storage Temperature	T <sub>stg</sub>	150	°C

• Refer to MMBT5086 for graphs



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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	I <sub>C</sub> = 100µA, I <sub>E</sub> = 0	50		V
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> = 1.0mA, I <sub>B</sub> = 0	50		V
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> = 35V, I <sub>E</sub> = 0		50	nA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = 5V, I <sub>C</sub> = 1.0mA	250	800	
		V <sub>CE</sub> = 5V, I <sub>C</sub> = 1.0mA	250		
		V <sub>CE</sub> = 5V, I <sub>C</sub> = 1.0mA	250		
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 1.0mA, I <sub>B</sub> = 1.0mA		0.3	V
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = 1.0mA, I <sub>B</sub> = 1.0mA		0.85	V
Current Gain-Bandwidth Product	f <sub>T</sub>	I <sub>C</sub> = 500µA, V <sub>CE</sub> = 5V f = 20MHz	40		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 5V, I <sub>E</sub> = 0 f = 100kHz		4.0	pF
Noise Figure	NF	V <sub>CE</sub> = 5V, I <sub>C</sub> = 20mA R <sub>S</sub> = 10KΩ f = 10Hz to 15.7KHz		2	dB
		V <sub>CE</sub> = 5V, I <sub>C</sub> = 100µA R <sub>S</sub> = 3KΩ, f = 1KHz		2	dB

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Marking

