

MMBT5087**PNP EPITAXIAL SILICON TRANSISTOR****LOW NOISE TRANSISTOR****ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)**

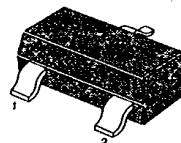
Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	3	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	T_{stg}	150	$^\circ\text{C}$

• Refer to MMBT5086 for graphs

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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = 100\mu\text{A}$, $I_E = 0$	50		V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 1.0\text{mA}$, $I_B = 0$	50		V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 35\text{V}$, $I_E = 0$		50	nA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}$, $I_C = 100\mu\text{A}$	250	800	
		$V_{CE} = 5\text{V}$, $I_C = 1.0\text{mA}$	250		
		$V_{CE} = 5\text{V}$, $I_C = 10\text{mA}$	250		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1.0\text{mA}$		0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1.0\text{mA}$		0.85	V
Current Gain-Bandwidth Product	f_T	$I_C = 500\mu\text{A}$, $V_{CE} = 5\text{V}$ $f = 20\text{MHz}$	40		MHz
Output Capacitance	C_{ob}	$V_{CB} = 5\text{V}$, $I_E = 0$ $f = 100\text{kHz}$		4.0	pF
Noise Figure	NF	$V_{CE} = 5\text{V}$, $I_C = 20\text{mA}$ $R_S = 10\text{K}\Omega$ $f = 10\text{Hz to } 15.7\text{KHz}$		2	dB
		$V_{CE} = 5\text{V}$, $I_C = 100\mu\text{A}$ $R_S = 3\text{K}\Omega$, $f = 1\text{KHz}$		2	dB

SOT-23



1. Base 2. Emitter 3. Collector

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Marking

