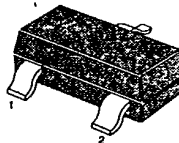


MMBT5086**PNP EPITAXIAL SILICON TRANSISTOR****LOW NOISE TRANSISTOR****ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	50	V
Collector-Emitter Voltage	V_{CE0}	50	V
Emitter-Base Voltage	V_{EB0}	3	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	T_{stg}	150	$^\circ\text{C}$

SOT-23



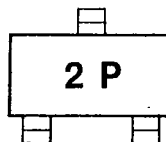
1. Base 2. Emitter 3. Collector

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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CB0}	$I_C = 100\mu\text{A}$, $I_E = 0$	50		V
Collector-Emitter Breakdown Voltage	BV_{CE0}	$I_C = 1\text{mA}$, $I_B = 0$	50		V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 35\text{V}$, $I_E = 0$		50	nA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}$, $I_C = 100\mu\text{A}$	150	500	
		$V_{CE} = 5\text{V}$, $I_C = 1\text{mA}$	150		
		$V_{CE} = 5\text{V}$, $I_C = 10\text{mA}$	150		
		$I_C = 10\text{mA}$, $I_B = 1\text{mA}$		0.3	V
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C = 10\text{mA}$, $I_B = 1\text{mA}$		0.85	V
Base-Emitter Saturation Voltage	$V_{BE}(\text{sat})$	$I_C = 10\text{mA}$, $I_B = 1\text{mA}$			V
Current Gain-Bandwidth Product	f_T	$I_C = 500\mu\text{A}$, $V_{CE} = 5\text{V}$	40		MHz
		$f = 20\text{MHz}$			
Output Capacitance	C_{ob}	$V_{CB} = 5\text{V}$, $I_E = 0$		4	pF
		$f = 100\text{kHz}$			
Noise Figure	NF	$I_C = 100\mu\text{A}$, $V_{CE} = 5\text{V}$		3	dB
		$f = 1\text{kHz}$, $R_S = 3\text{K}\Omega$			

3

Marking

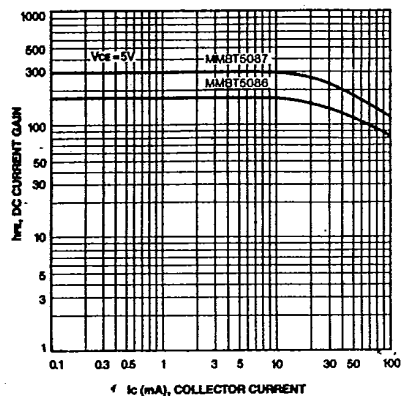


MMBT5086

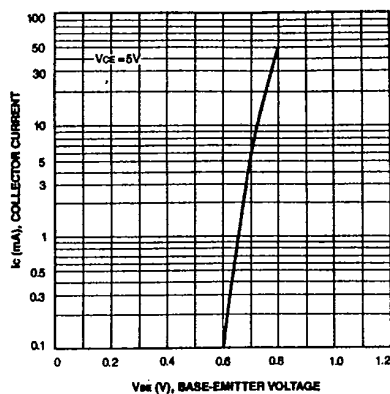
PNP EPITAXIAL SILICON TRANSISTOR

T-29-19

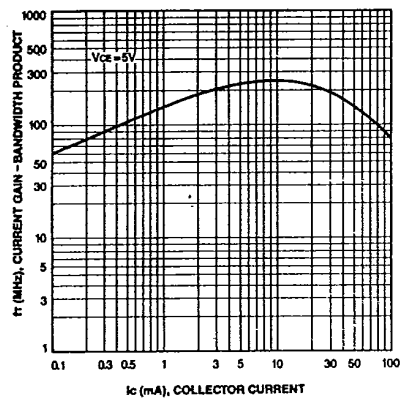
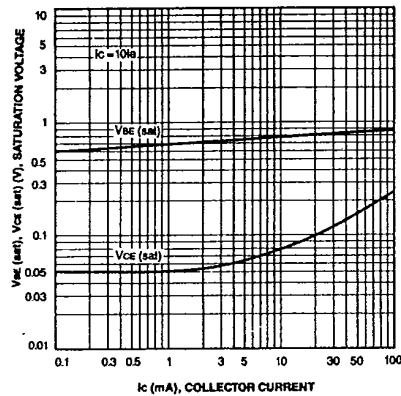
DC CURRENT GAIN



BASE-EMITTER ON VOLTAGE



CURRENT GAIN BANDWIDTH PRODUCT

BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE

OUTPUT CAPACITANCE

