

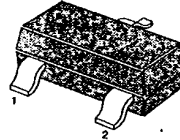
MMBT5550**NPN EPITAXIAL SILICON TRANSISTOR**

T-29-19

HIGH VOLTAGE TRANSISTOR**ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	160	V
Collector-Emitter Voltage	V_{CE0}	140	V
Emitter-Base Voltage	V_{EB0}	6	V
Collector Current	I_C	600	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	T_{stg}	150	$^\circ\text{C}$

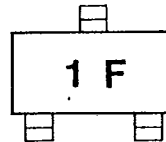
SOT-23



1. Base 2. Emitter 3. Collector

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

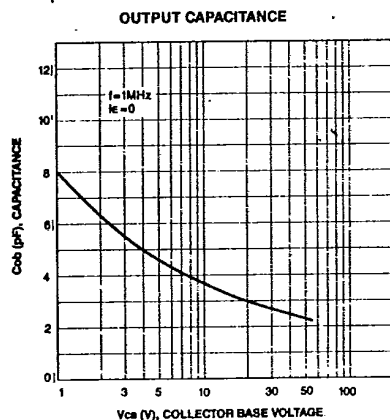
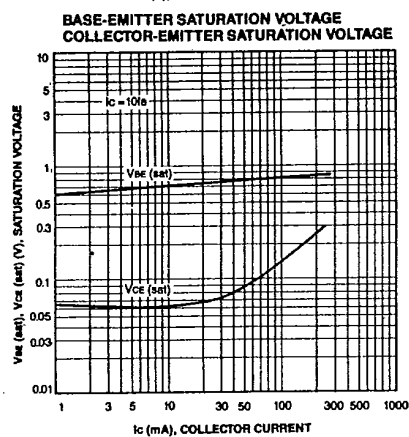
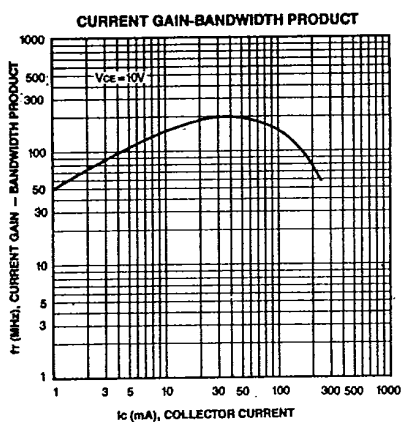
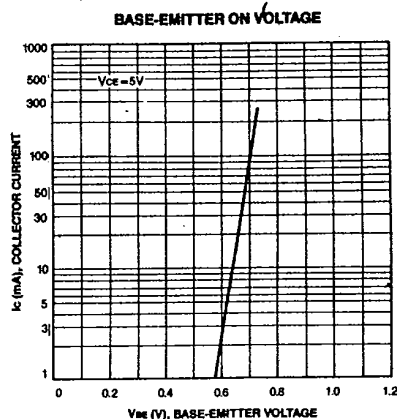
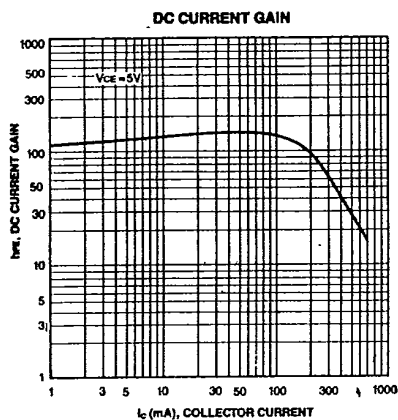
Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CB0}	$I_C = 10\mu\text{A}$, $I_E = 0$	160		V
Collector-Emitter Breakdown Voltage	BV_{CE0}	$I_C = 1\text{mA}$, $I_B = 0$	140		V
Emitter-Base Breakdown Voltage	BV_{EB0}	$I_E = 10\mu\text{A}$, $I_C = 0$	6		V
Collector Cutoff Current	I_{CB0}	$V_{CB} = 100\text{V}$, $I_E = 0$		100	nA
Emitter Cutoff Current	I_{EB0}	$V_{EB} = 4\text{V}$, $I_C = 0$		50	nA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}$, $I_C = 1.0\text{mA}$	60		
		$V_{CE} = 5\text{V}$, $I_C = 10\text{mA}$	60	250	
		$V_{CE} = 5\text{V}$, $I_C = 50\text{mA}$	20		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1\text{mA}$		0.15	V
		$I_C = 50\text{mA}$, $I_B = 5\text{mA}$		0.25	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1\text{mA}$		1.0	V
		$I_C = 50\text{mA}$, $I_B = 5\text{mA}$		1.2	V
Current Gain-Bandwidth Product	f_T	$I_C = 10\text{mA}$, $V_{CE} = 10\text{V}$ $f = 100\text{MHz}$	100	300	MHz
Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}$, $I_E = 0$ $f = 1.0\text{MHz}$		6.0	pF

Marking

MMBT5550

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