

MMBTA63

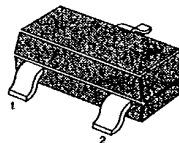
PNP EPITAXIAL SILICON TRANSISTOR

DARLINGTON TRANSISTOR

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	30	V
Collector-Emitter Voltage	V_{CES}	30	V
Emitter-Base Voltage	V_{EB0}	10	V
Collector Current	I_C	500	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	T_{stg}	150	$^\circ\text{C}$

SOT-23



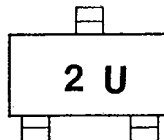
1. Base 2. Emitter 3. Collector

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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CES}	$I_C = 100\mu\text{A}, I_B = 0$	30		V
Collector Cutoff Current	I_{CB0}	$V_{CB} = 30\text{V}, I_B = 0$		100	nA
Emitter Cutoff Current	I_{EB0}	$V_{BE} = 10\text{V}, I_C = 0$		100	nA
*DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 10\text{mA}$ $V_{CE} = 5\text{V}, I_C = 100\text{mA}$	5,000 10,000		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100\text{mA}, I_B = 0.1\text{mA}$		1.5	V
Base-Emitter On Voltage	$V_{BE(on)}$	$I_C = 100\text{mA}, V_{CE} = 5\text{V}$		2	V
Current Gain-Bandwidth Product	f_T	$I_C = 10\text{mA}, V_{CL} = 50\text{V}$ $f = 100\text{MHz}$	125		MHz

*Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

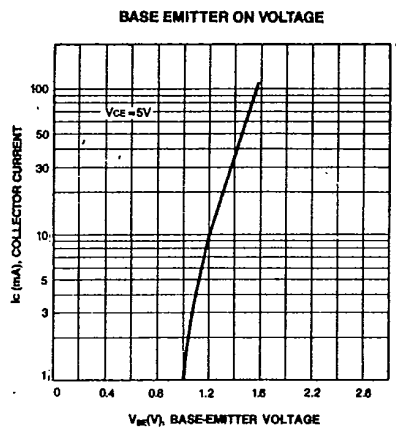
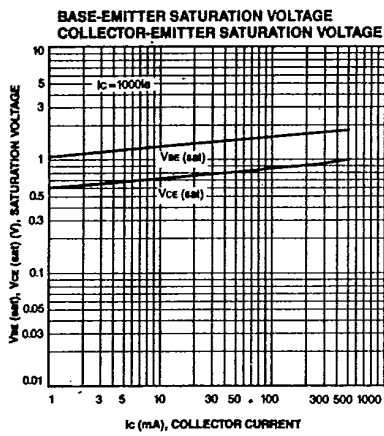
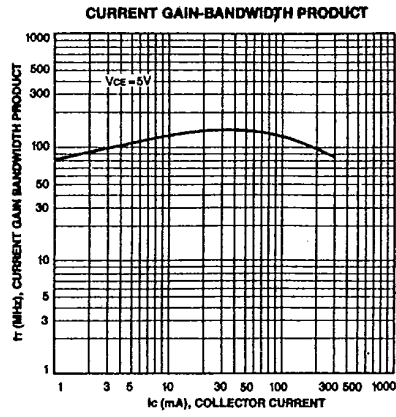
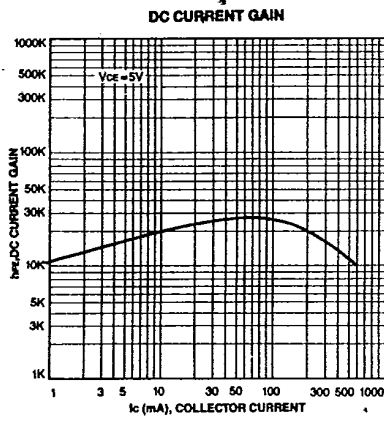
Marking



MMBT63

PNP EPITAXIAL SILICON TRANSISTOR

T-29-29



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