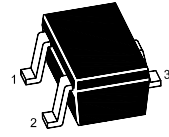


**PNP Silicon General Purpose Transistor**1.Base 2.Emitter 3.Collector
SOT-323 Plastic Package**Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)**

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	40	V
Collector Emitter Voltage	$-V_{CEO}$	40	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	600	mA
Total Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 1\text{ V}$, $-I_C = 0.1\text{ mA}$	h_{FE}	30	-	-
at $-V_{CE} = 1\text{ V}$, $-I_C = 1\text{ mA}$	h_{FE}	60	-	-
at $-V_{CE} = 1\text{ V}$, $-I_C = 10\text{ mA}$	h_{FE}	100	-	-
at $-V_{CE} = 2\text{ V}$, $-I_C = 150\text{ mA}$	h_{FE}	100	300	-
at $-V_{CE} = 2\text{ V}$, $-I_C = 500\text{ mA}$	h_{FE}	20	-	-
Collector Cutoff Current at $-V_{CB} = 35\text{ V}$	$-I_{CBO}$	-	0.1	μA
Base Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	0.1	μA
Collector Base Breakdown Voltage at $-I_C = 0.1\text{ mA}$	$-V_{(BR)CBO}$	40	-	V
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	40	-	V
Emitter Base Breakdown Voltage at $-I_E = 0.1\text{ mA}$	$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $-I_C = 150\text{ mA}$, $-I_B = 15\text{ mA}$	$-V_{CEsat}$	-	0.4	V
at $-I_C = 500\text{ mA}$, $-I_B = 50\text{ mA}$	$-V_{CEsat}$	-	0.75	V
Base Emitter Saturation Voltage at $-I_C = 150\text{ mA}$, $-I_B = 15\text{ mA}$	$-V_{BEsat}$	-	0.95	V
at $-I_C = 500\text{ mA}$, $-I_B = 50\text{ mA}$	$-V_{BEsat}$	-	1.3	V
Current Gain Bandwidth Product at $-V_{CE} = 10\text{ V}$, $-I_C = 20\text{ mA}$, $f = 100\text{ MHz}$	f_T	200	-	MHz
Collector Base Capacitance at $-V_{CB} = 10\text{ V}$, $-I_E = 0$, $f = 1\text{ MHz}$	C_{cb}	-	8.5	pF

MMBT4403W

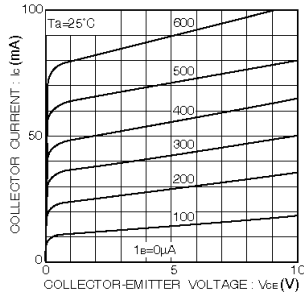


Fig.1 Grounded emitter output characteristics

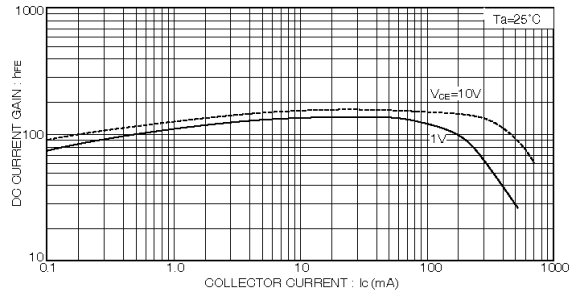


Fig.3 DC current gain vs. collector current (I)

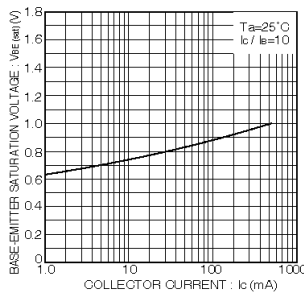


Fig.2 Base-emitter saturation voltage vs. collector current

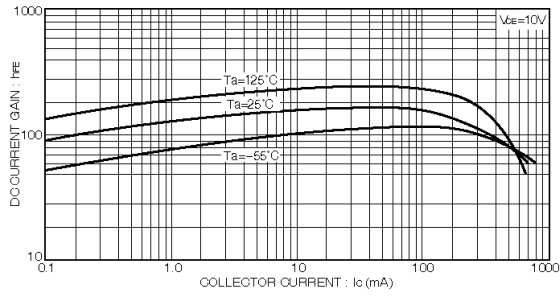


Fig.4 DC current gain vs. collector current (II)

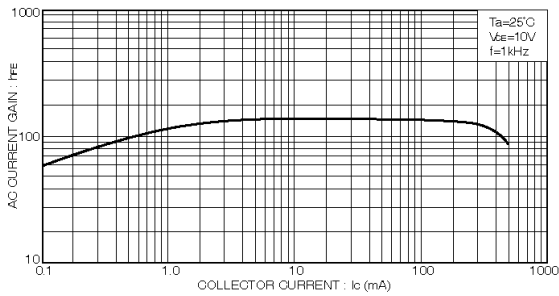


Fig.5 AC current gain vs. collector current

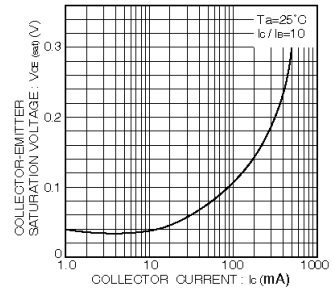


Fig.6 Collector-emitter saturation voltage vs. collector current