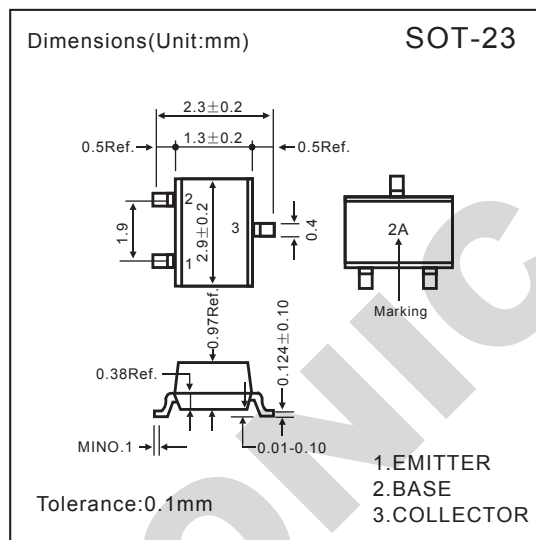


SOT-23 TRANSISTOR

GENERAL PURPOSE TRANSISTOR

- Complementary Pair with MMBT3904.
- Collector Dissipation: $P_c=225\text{mW}$
- Collector-Emitter Voltage: $V_{CEO}=-40\text{V}$
- PNP Epitaxial Silicon Transistor



Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Rating	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	-200	mA
Collector Dissipation	P_c	225	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-50~150	°C

Electrical Characteristics

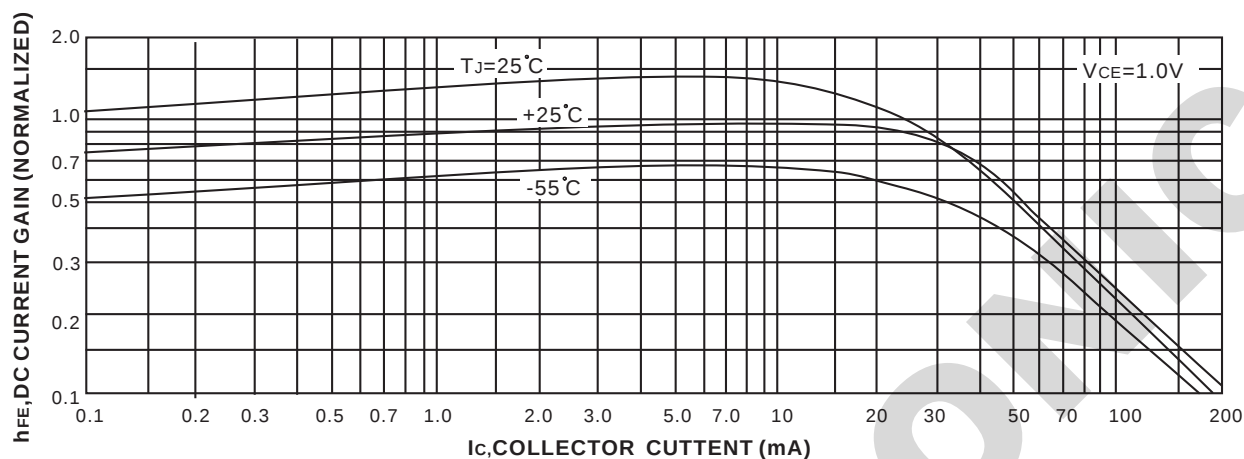
(Ta=25°C)

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Collector-Emitter Breakdown Voltage	BV_{CEO}	-40			V	$I_c=-1\text{mA}$, $I_B=0$
Collector-Base Breakdown Voltage	BV_{CBO}	-40			V	$I_c=-10\mu\text{A}$, $I_E=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	-5			V	$I_E=-10\mu\text{A}$, $I_C=0$
Collector Cut-off Current	I_{CEO}			-50	nA	$V_{CB}=-30\text{V}$, $V_{EB}=-3\text{V}$
Emitter-Base Cutoff Current	I_{EBO}			-50	nA	$V_{CB}=-3\text{V}$, $I_C=0$
DC Current Gain	h_{FE1}	60				$V_{CE}=-1\text{V}$, $I_c=-0.1\text{mA}$
DC Current Gain	h_{FE2}	80				$V_{CE}=-1\text{V}$, $I_c=-1\text{mA}$
DC Current Gain	h_{FE3}	100		300		$V_{CE}=-1\text{V}$, $I_c=-10\text{mA}$
DC Current Gain	h_{FE4}	60				$V_{CE}=-1\text{V}$, $I_c=-50\text{mA}$
DC Current Gain	h_{FE5}	30				$V_{CE}=-1\text{V}$, $I_c=-100\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.4	V	$I_c=-50\text{mA}$, $I_B=-5\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.25	V	$I_c=-10\text{mA}$, $I_B=-1\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.95	V	$I_c=-50\text{mA}$, $I_B=-5\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.85	V	$I_c=-10\text{mA}$, $I_B=-1\text{mA}$
Output Capacitance	C_{ob}			4.5	PF	$V_{CE}=-5\text{V}$, $I_c=0$, $f=1\text{MHz}$
Current Gain-Bandwidth Product	f_T	250			MHz	$V_{CE}=-20\text{V}$, $I_c=-10\text{mA}$, $f=100\text{MHz}$

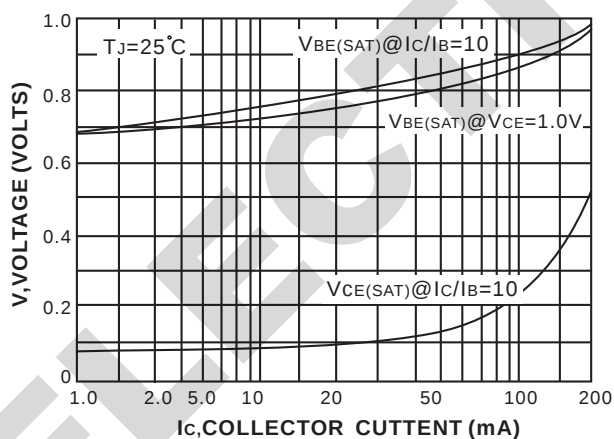
Total Device Dissipation: $FR=1 \times 0.75 \times 0.062$ in Board Derate 25°C

MARKING: 2A

Typical Characteristics



DC Current Gain



“On” Voltages