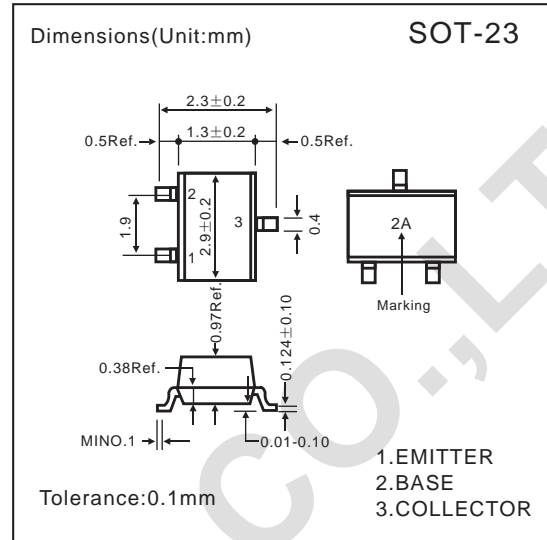


### SOT-23 TRANSISTOR

#### GENERAL PURPOSE TRANSISTOR

- Complementary Pair with MMBT3904LT1.
- Collector Dissipation:  $P_c=225mW$
- Collector-Emitter Voltage:  $V_{CE0}=-40V$
- PNP Epitaxial Silicon Transistor



#### Absolute Maximum Ratings

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

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	-40	V
Collector-Emitter Voltage	$V_{CE0}$	-40	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_c$	-200	mA
Collector Dissipation	$P_c$	225	mW
Junction Temperature	$T_j$	150	$^{\circ}C$
Storage Temperature	$T_{stg}$	-50~150	$^{\circ}C$

#### Electrical Characteristics

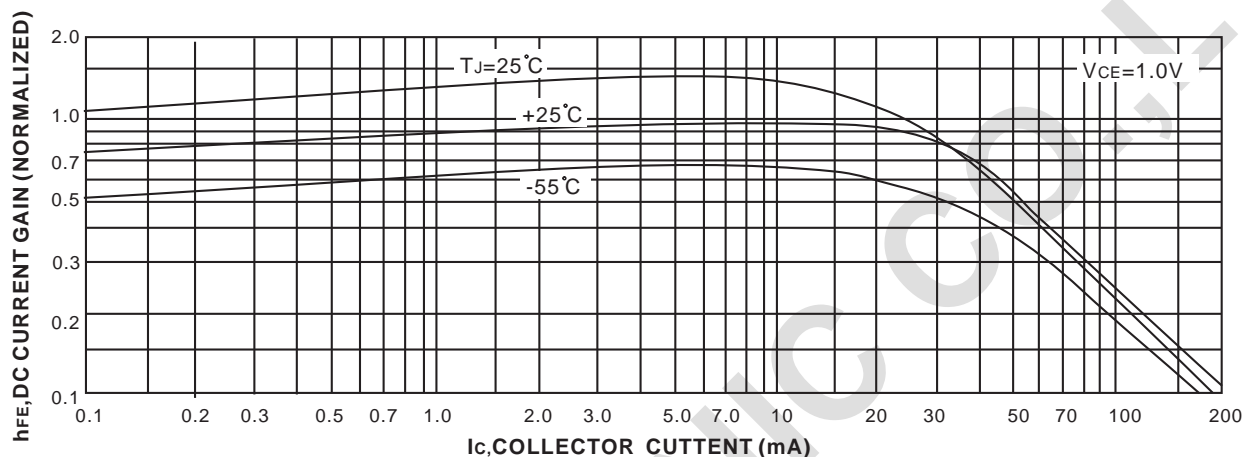
( $T_a=25^{\circ}C$ )

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Collector-Emitter Breakdown Voltage	$BV_{CE0}$	-40			V	$I_c=-1mA, I_B=0$
Collector-Base Breakdown Voltage	$BV_{CB0}$	-40			V	$I_c=-10\mu A, I_E=0$
Emitter-Base Breakdown Voltage	$BV_{EB0}$	-5			V	$I_E=-10\mu A, I_c=0$
Collector Cut-off Current	$I_{CE0}$			-50	nA	$V_{CB}=-30V, V_{EB}=-3V$
Emitter-Base Cutoff Current	$I_{EB0}$			-50	nA	$V_{CB}=-3V, I_c=0$
DC Current Gain	$h_{FE1}$	60				$V_{CE}=-1V, I_c=-0.1mA$
DC Current Gain	$h_{FE2}$	80				$V_{CE}=-1V, I_c=-1mA$
DC Current Gain	$h_{FE3}$	100		300		$V_{CE}=-1V, I_c=-10mA$
DC Current Gain	$h_{FE4}$	60				$V_{CE}=-1V, I_c=-50mA$
DC Current Gain	$h_{FE5}$	30				$V_{CE}=-1V, I_c=-100mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.4	V	$I_c=-50mA, I_B=-5mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.25	V	$I_c=-10mA, I_B=-1mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.95	V	$I_c=-50mA, I_B=-5mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.85	V	$I_c=-10mA, I_B=-1mA$
Output Capacitance	$C_{ob}$			4.5	PF	$V_{CE}=-5V, I_c=0, f=1MHz$
Current Gain-Bandwidth Product	$f_T$	250			MHz	$V_{CE}=-20V, I_c=-10mA, f=100MHz$

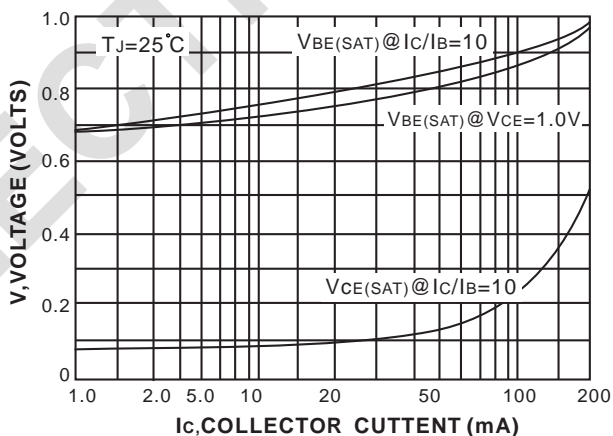
Total Device Dissipation:FR=1X0.75X0.062 in Board Derate  $25^{\circ}C$

Pulse Test: Pulse Width 300uS Duty cycle 2%

### Typical Characteristics



DC Current Gain



“On” Voltages