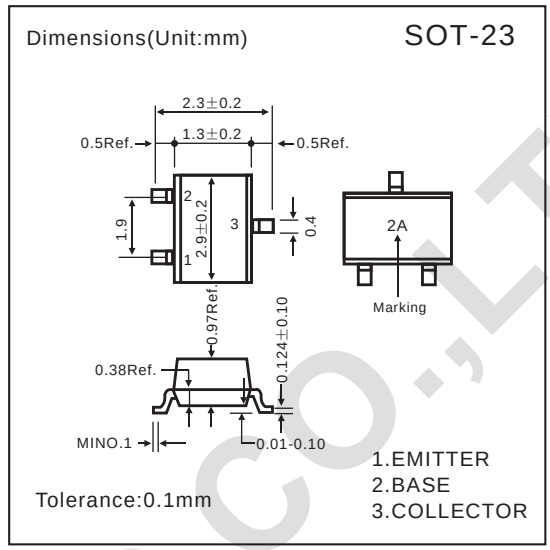
WEJ®

RoHS

MMBT3906LT1

SOT-23 TRANSISTOR



GENERAL PURPOSE TRANSISTOR

- Complementary Pair with MMBT3904LT1.
- Collector Dissipation:Pc=225mW
- Collector-Emitter Voltage:V_{CEO}=-40V
- 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	Ic	-200	mA
Collector Dissipation	Pc	225	mW
Junction Temperature	T_j	150	°C
Storage Temperature	Tstg	-50~150	°C

Electrical Characteristics

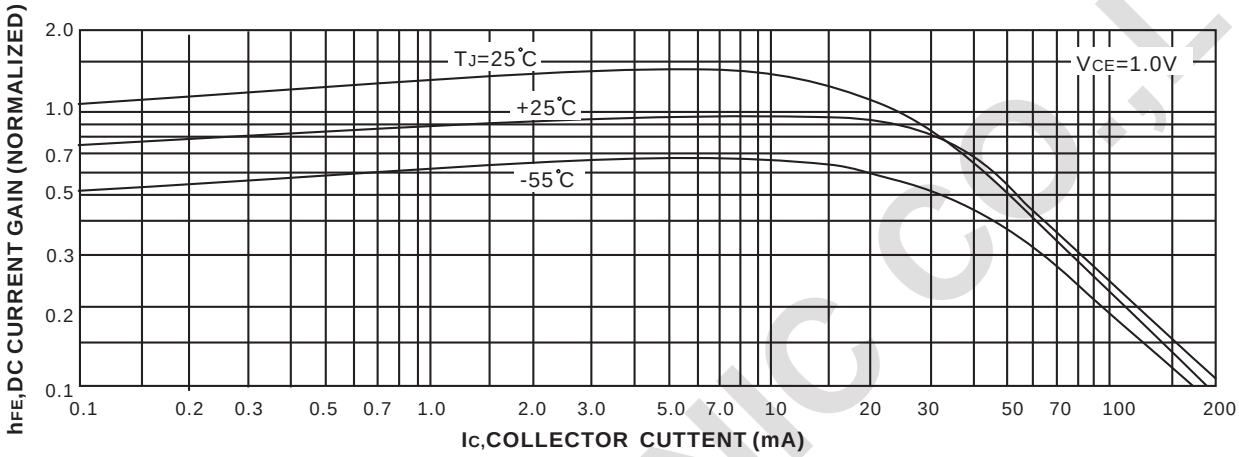
(Ta=25°C)

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Collector-Emitter Breakdown Voltage	BV_{CEO}	-40			V	I_C=-1mA I_B=0
Collector-Base Breakdown Voltage	BV_{CBO}	-40			V	I_C=-10μA I_E=0
Emitter-Base Breakdown Voltage	BV_{EBO}	-5			V	I_E=-10μA I_C=0
Collector Cut-off Current	I_{CEO}			-50	nA	V_{CB}=-30V, V_{EB}=-3V
Emitter-Base Cutoff Current	I_{EBO}			-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

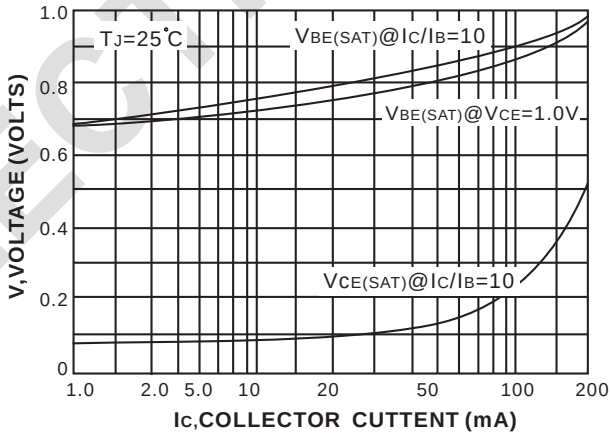
Total Device Dissipation:FR=1X0.75X0.062 in Board Derate 25°C

Pulse Test: Pulse Width 300uS Duty cycle 2%

Typical Characteristics



DC Current Gain



"On" Voltages