WEJ®

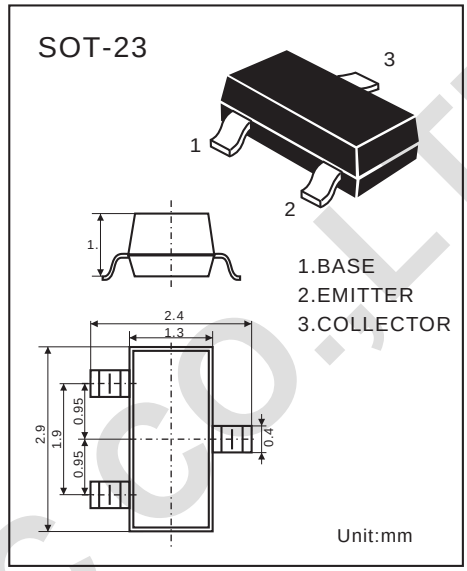
RoHS

MMBT8550LT1

PNP EPITAXIAL SILICON TRANSISTOR

2W OUTPUT AMPLIFIER OF PORTABLE
RADIOS IN CLASS
B PUSH-PULL OPERATION

- Complement to MMPT8050LT1
- Collector-current:Ic=-500mA
- High Total Power Dissipation:Pc=225mW



ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EB}	-6	V
Collector Current	Ic	-500	mA
Collector Dissipation Ta=25°C*	P_D	225	mW
Junction Temperature	T_j	150	°C
Storage Temperature	Tstg	-55-150	°C

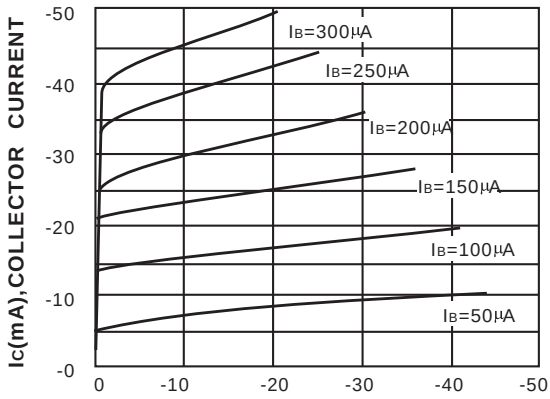
Electrical Characteristics

(Ta=25°C)

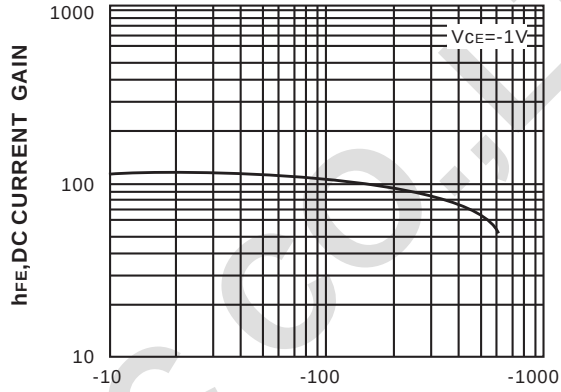
Characteristic	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Collector-Base Breakdown Voltage	BV_{CBO}	-40			V	I_C=-100uA I_E=0
Collector-Emitter Breakdown Voltage#	BV_{CEO}	-25			V	I_C=-1mA I_B=0
Emitter-Base Breakdown Voltage	BV_{EBO}	-6			V	I_E=-100uA I_C=0
Collector-Base Cutoff Current	I_{CBO}			-100	nA	V_{CB}=-35V, I_E=0
Emitter-Base Cutoff Current	I_{EBO}			-100	nA	V_{EB}=-6V, I_C=0
DC Current Gain	h_{FE1}	45	170			V_{CE}=-1V, I_C=-5mA
DC Current Gain	h_{FE2}	85	160	300		V_{CE}=-1V, I_C=-50mA
DC Current Gain	h_{FE3}	30	80			V_{CE}=-1V, I_C=-500mA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.28	-0.6	V	I_C=-500mA, I_B=-50mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.98	-1.2	V	I_C=-500mA, I_B=-50mA
Base-Emitter On Voltage	$V_{BE(sat)}$		-0.66	1	V	I_{CE}=-1mA, I_C=-10mA
Output Capacitance	C_{ob}		15		PF	V_{CB}=-10V, I_E=0,f=1MHz
Current Gain-Bandwidth Product	f_T	100	200		MHz	V_{CE}=-10V, I_C=-50mA

*Total Device Dissipation:FR=1X0.75X0.062 in Board Derate 25°C
#Pulse Test: Pulse Width 300uS Duty cycle 2%
DEVICE MARKING:
MMBT8550LT1=B6

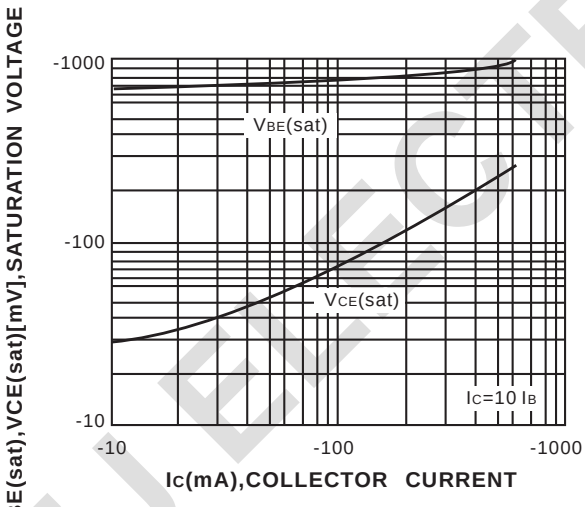
Typical Characteristics



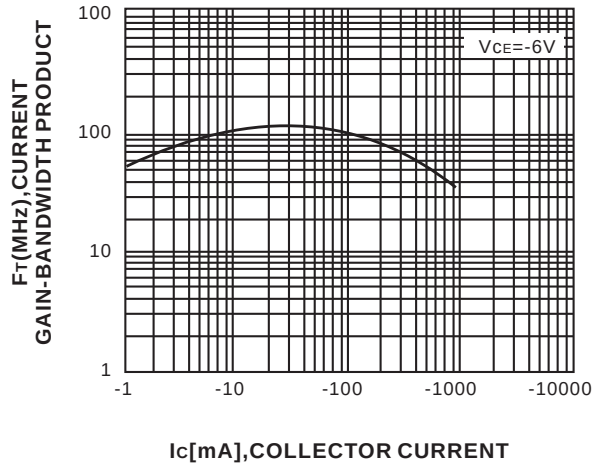
Static Characteristic



DC Current Gain



Bace-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Current Gain Bandwidth Product