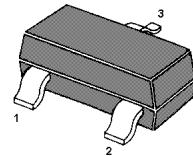


SOT-23 Plastic-Encapsulate Transistors

MMBT2907A TRANSISTOR (PNP)

FEATURES

- Epitaxial planar die construction
- Complementary NPN Type available(MMBT2222A)



1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

Marking: 2F
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-60	V
V _{CEO}	Collector-Emitter Voltage	-60	V
V _{EB0}	Emitter-Base Voltage	-5	V
I _c	Collector Current -Continuous	-600	mA
P _d	Total Device Dissipation	250	mW
R _{θJA}	Thermal Resistance Junction to Ambient	500	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55 to +150	°C

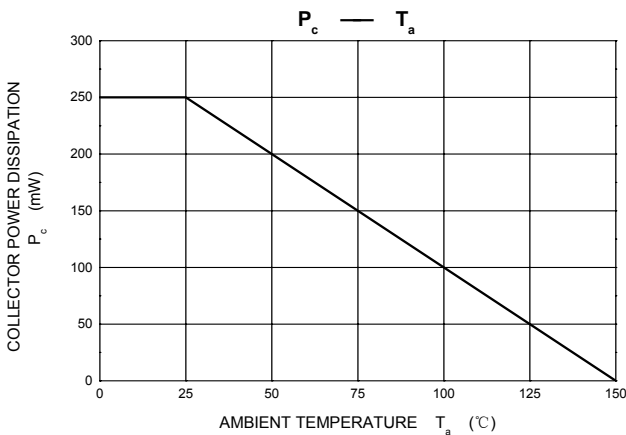
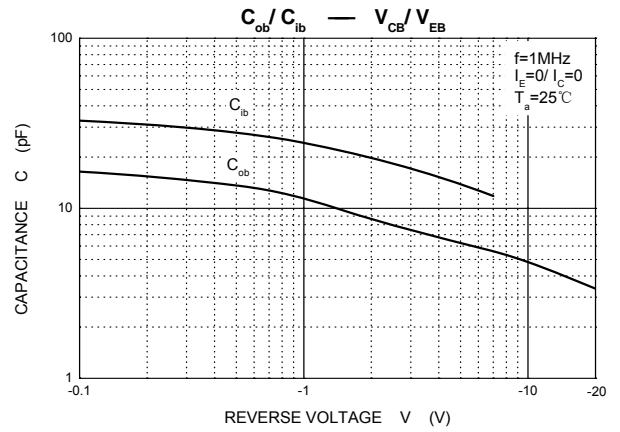
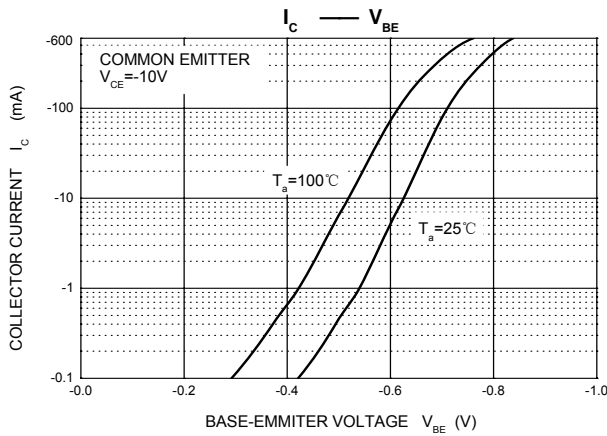
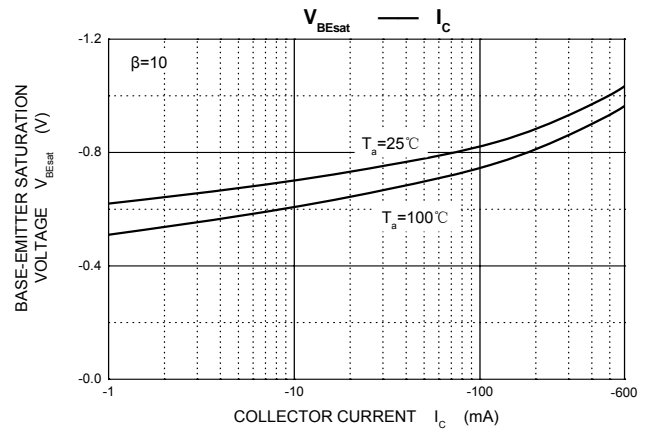
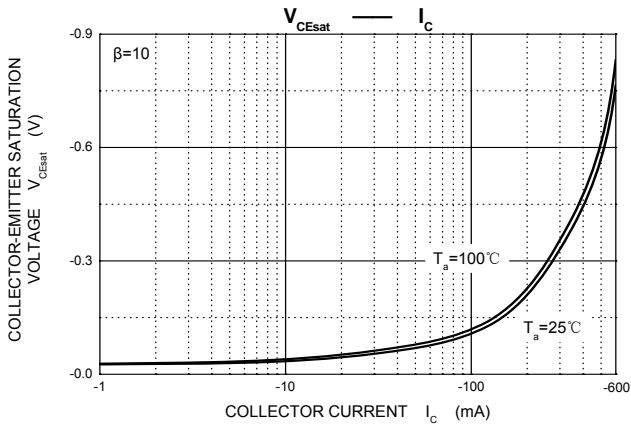
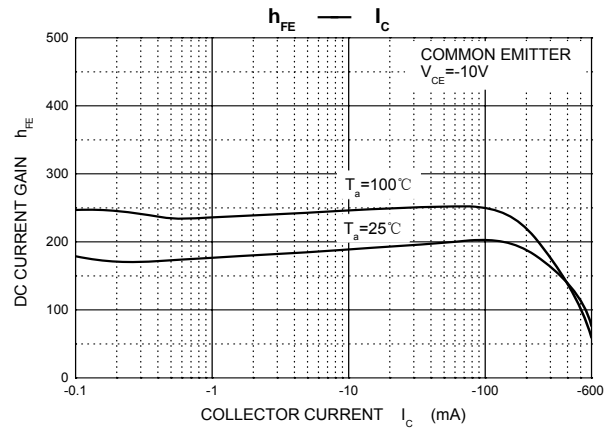
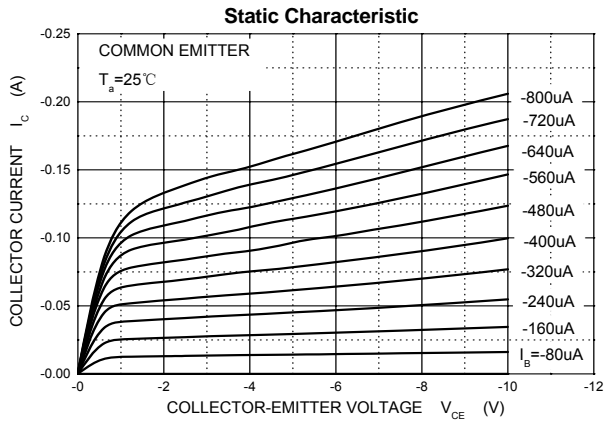
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _c =-10μA, I _E =0	-60			V
Collector-emitter breakdown voltage	V _{(BR)CEO} *	I _c =-10mA, I _B =0	-60			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-10μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-50V, I _E =0			-10	nA
DC current gain	h _{FE(1)} *	V _{CE} =-10V, I _C =-0.1mA	75			
	h _{FE(2)} *	V _{CE} =-10V, I _C =-1mA	100			
	h _{FE(3)} *	V _{CE} =-10V, I _C =-10mA	100			
	h _{FE(4)} *	V _{CE} =-10V, I _C =-150mA	100		300	
	h _{FE(5)} *	V _{CE} =-10V, I _C =-500mA	50			
Collector-emitter saturation voltage	V _{CE(sat)} *	I _C =-150mA, I _B =-15mA			-0.4	V
	V _{CE(sat)} *	I _C =-500mA, I _B =-50mA			-1.60	V
Base-emitter saturation voltage	V _{BE(sat)} *	I _C =-150mA, I _B =-15mA			-1	V
	V _{BE(sat)} *	I _C =-500mA, I _B =-50mA			-2.6	V
Transition frequency	f _T	V _{CE} =-20V, I _C =-50mA, f=100MHz	200			MHz
Delay time	t _d	V _{CE} =-30V, I _C =-150mA, I _{B1} =-15mA			10	ns
Rise time	t _r				40	ns
Storage time	t _s	V _{CE} =-6V, I _C =-150mA, I _{B1} =- I _{B2} =- 15mA			80	ns
Fall time	t _f				30	ns



MMBT2907A

Typical Characteristics

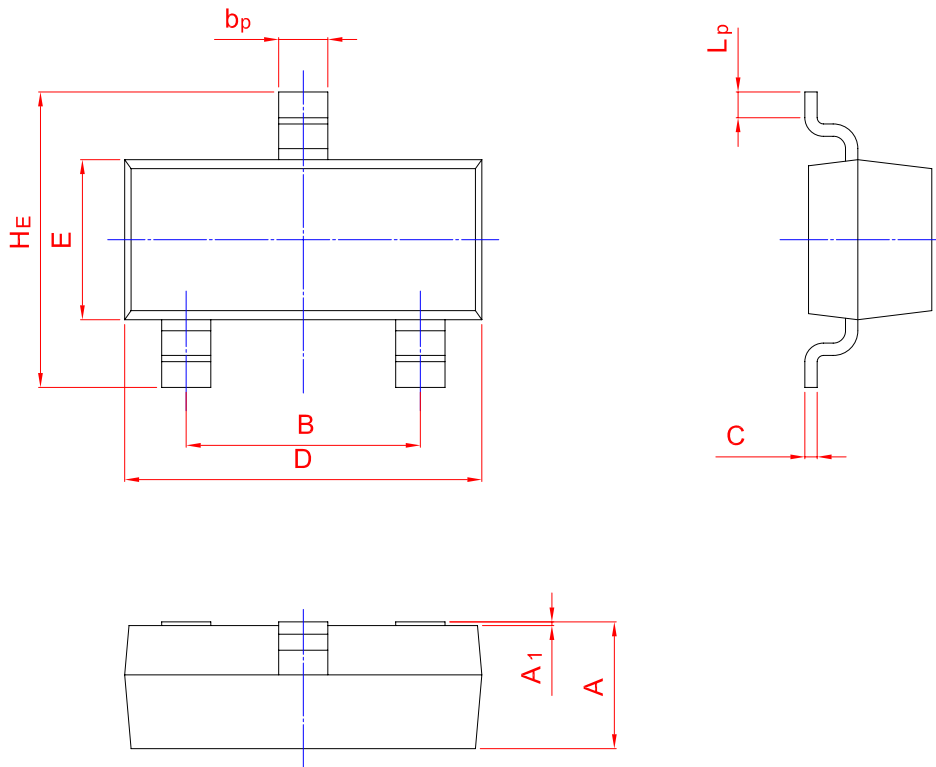
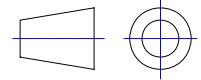


MMBT2907A

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	b_p	C	D	E	H_E	A_1	L_p
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20