

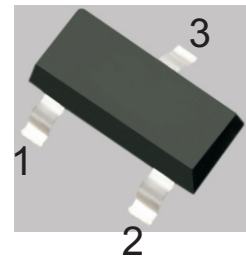


MMBT2907A
PNP TRANSISTOR

FEATURES

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

SOT-23



1.BASE
2.EMITTER
3.COLLECTOR

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CB0}	-60	V
Collector-Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current — Continuous	I_C	-600	mA
Total Device Dissipation	P_D	250	mW
Thermal Resistance From Junction To Ambient	R_{thJA}	500	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

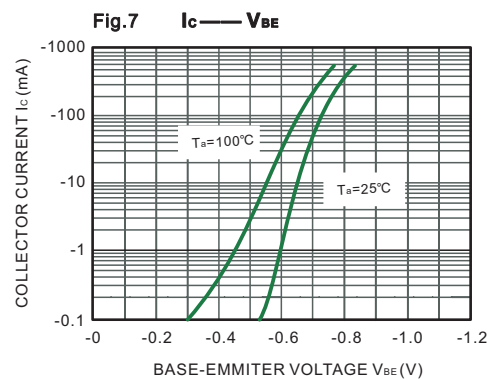
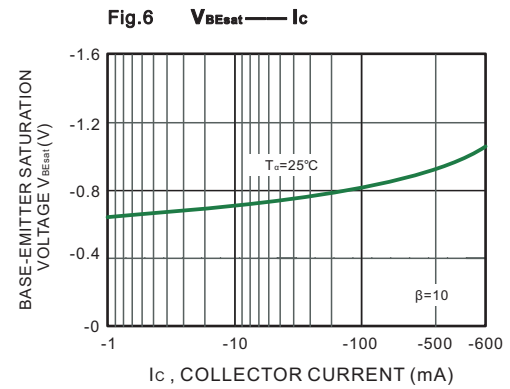
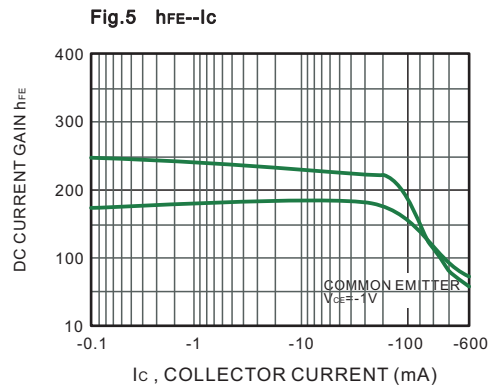
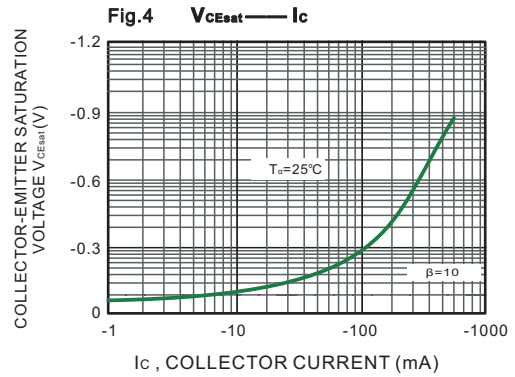
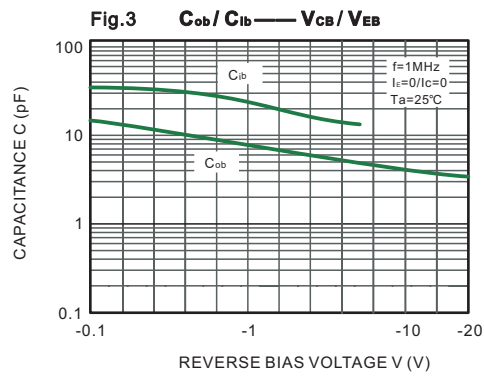
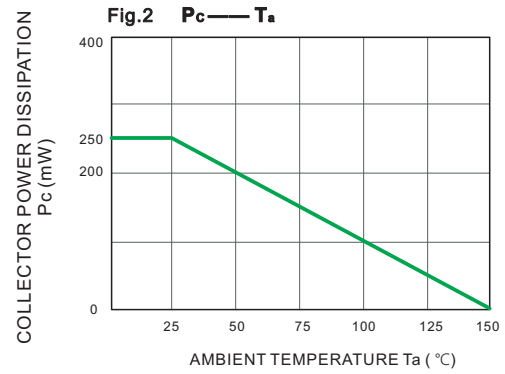
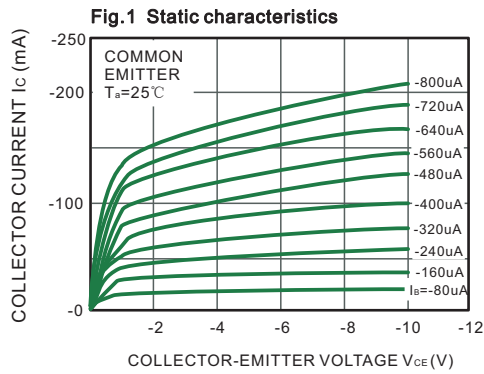
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -50V, I_E = 0$			-20	nA
Base cut-off current	I_{EBO}	$V_{EB} = -3V, I_C = 0$			-10	nA
Collector cut-off current	I_{CEX}	$V_{CE} = -30V, V_{BE} = -0.5V$			-50	nA
DC current gain	h_{FE1}	$V_{CE} = -10V, I_C = -150mA$	100		300	
	h_{FE2}	$V_{CE} = -10V, I_C = -0.1mA$	75			
	h_{FE3}	$V_{CE} = -10V, I_C = -1mA$	100			
	h_{FE4}	$V_{CE} = -10V, I_C = -10mA$	100			
	h_{FE5}	$V_{CE} = -10V, I_C = -500mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -150mA, I_B = -15mA$			-0.4	V
	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$			-1.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -150mA, I_B = -15mA$			-1.3	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	$V_{CE} = -30V,$			10	ns
Rise time	t_r	$I_C = -150mA, I_{B1} = -15mA$			25	ns
Storage time	t_s	$V_{CE} = -6V, I_C = -150mA$			225	ns
Fall time	t_f	$I_{B1} = -I_{B2} = -15mA$			60	ns

CLASSIFICATION OF $h_{FE}(1)$

HFE	100-300	
RANK	L	H
RANGE	100-200	200-300

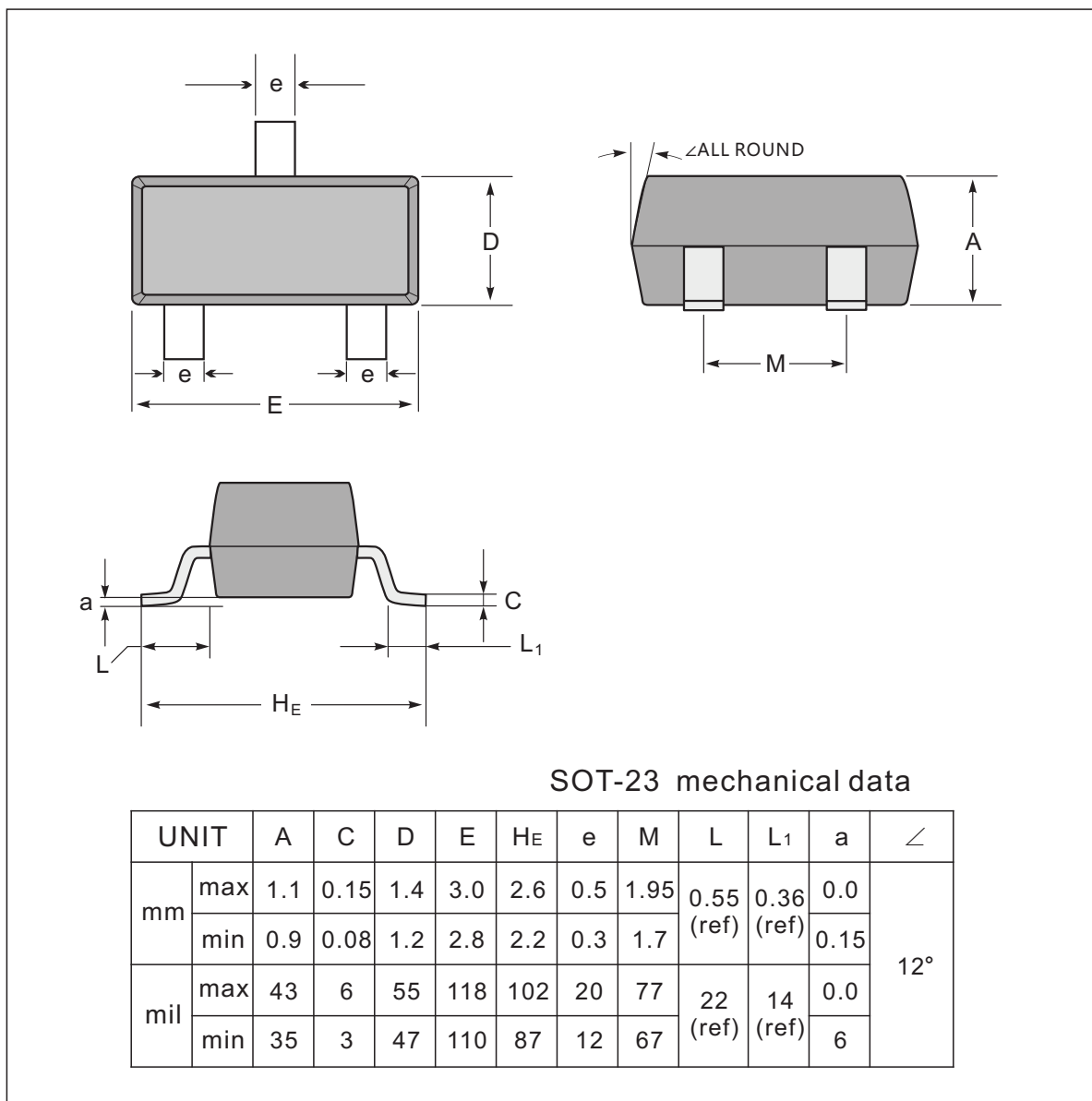


TYPICAL CHARACTERISTICS

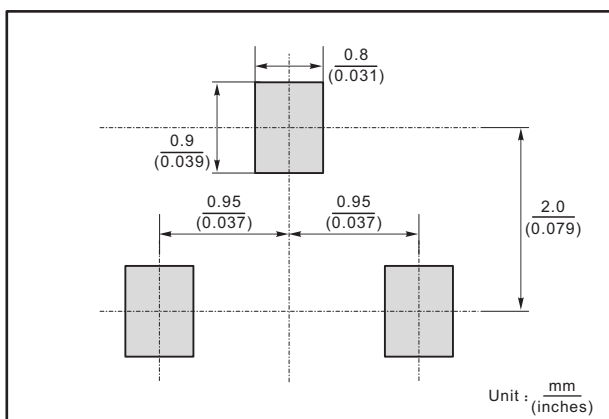




SOT-23 Package Outline Dimensions



The recommended mounting pad size



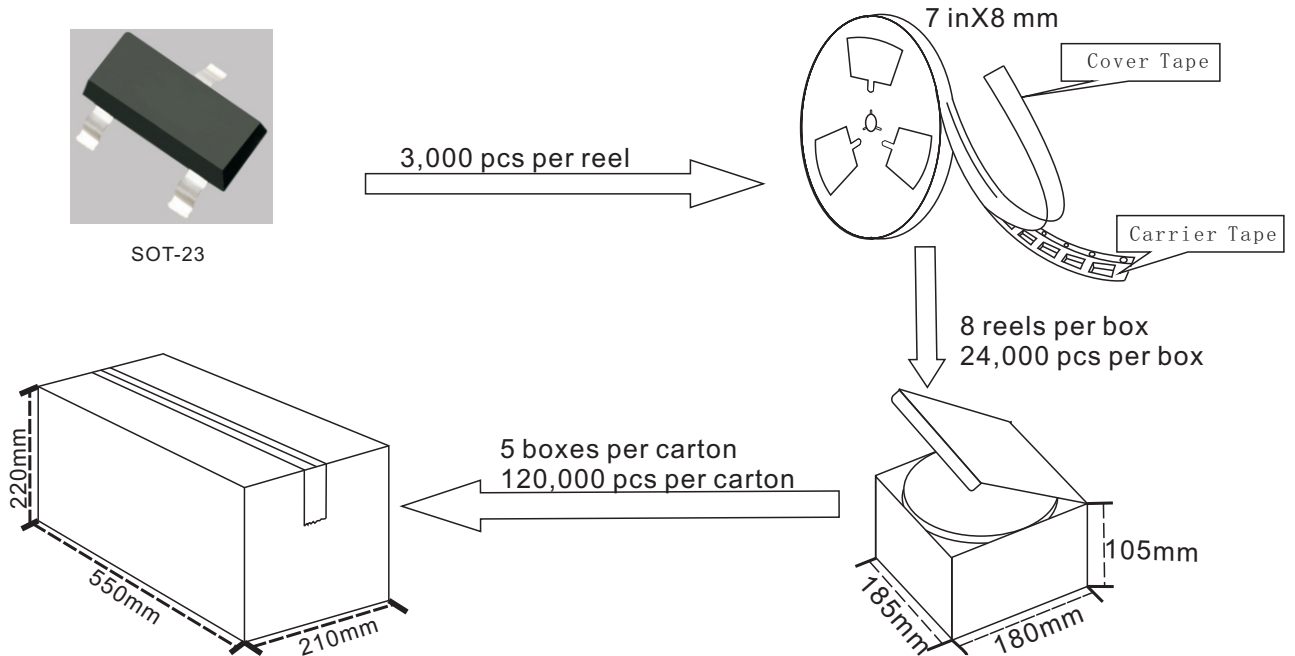
Marking

Type number	Marking code
MMBT2907A	2F

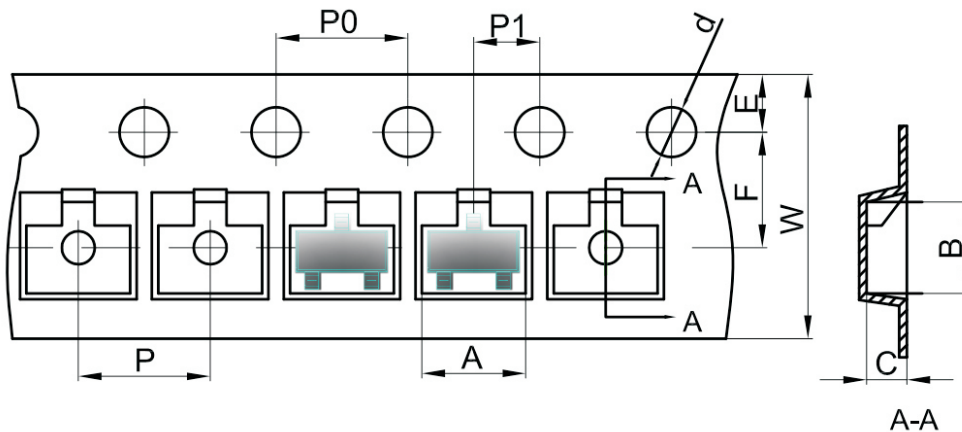


SOT-23 Packing

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)



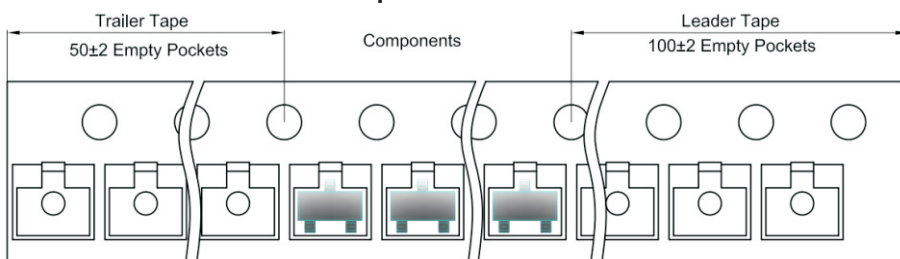
SOT-23 Embossed Carrier Tape



Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

Click to view products by [Jingdao manufacturer](#):

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [BC557/116](#) [BSW67A](#) [NJVMJD148T4G](#) [NTE123AP-10](#) [NTE153MCP](#) [NTE16](#)
[NTE195A](#) [NTE92](#) [2N4401-A](#) [2N6728](#) [2SA1419T-TD-H](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [2SC2712S-GR,LF](#) [SP000011176](#) [2N2907A](#) [2N3904-](#)
[NS](#) [2N5769](#) [2SC2412KT146S](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [MJE340](#) [Jantx2N5416](#) [US6T6TR](#) [NJL0281DG](#) [732314D](#) [CPH3121-TL-E](#)
[CPH6021-TL-H](#) [873787E](#) [IMZ2AT108](#) [MMST8098T146](#) [UMX21NTR](#) [MCH6102-TL-E](#) [NJL0302DG](#) [30A02MH-TL-E](#) [NTE13](#) [NTE26](#)
[NTE282](#) [NTE323](#) [NTE350](#) [NTE81](#) [STX83003-AP](#) [JANTX2N2920L](#) [JANSR2N2222AUB](#) [CMLT3946EG TR](#) [2SA1371D-AE](#)