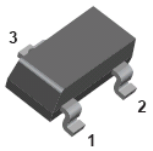
MMBT3906LT1

PNP General Purpose Transistor

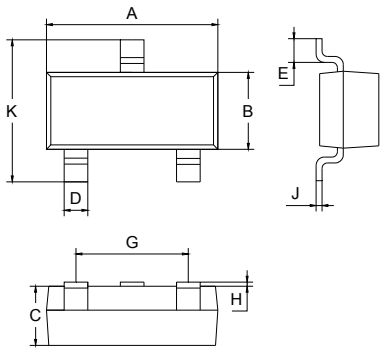
RoHS COMPLIANT



1. BASE
2. EMITTER
3. COLLECTOR

FEATURES

- Epitaxial planar die construction.
- Complementary NPN type available (MMBT3904).
- Collector Current Capability I_{CM} =-200mA.
- Low Voltage(Max:-40V).



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

APPLICATIONS

- Ideal for medium power amplification and switching.

ORDERING INFORMATION

Type No.	Marking	Package Code
MMBT3906LT1	2A	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	Value	UNIT
V_{CBO}	collector-base voltage	open emitter	-40	V
V_{CEO}	collector-emitter voltage	open base	-40	V
V_{EBO}	emitter-base voltage	open collector	-6	V
I_C	collector current (DC)		-100	mA
I_{CM}	peak collector current		-200	mA
I_{BM}	peak base current		-100	mA
P_{tot}	total power dissipation	Tamb≤25°C	250	mW
T_{stg}	storage temperature		-65 to +150	°C
T_j	junction temperature		150	°C
T_{amb}	operating ambient temperature		-65 to +150	°C

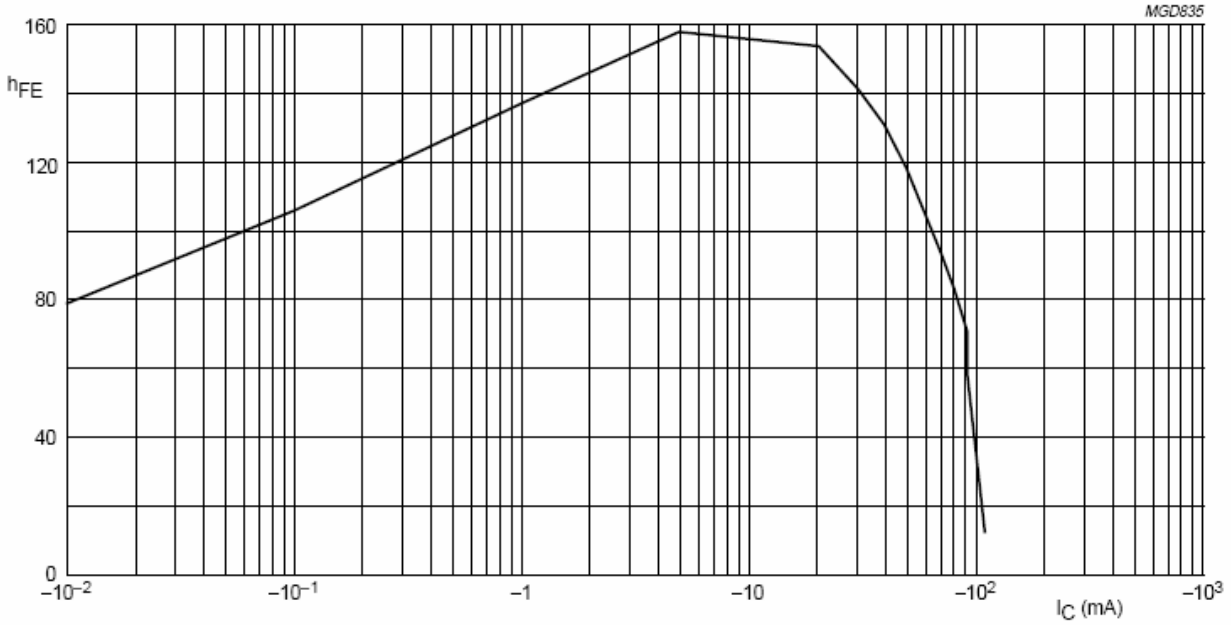
Note Transistor mounted on an FR4 printed-circuit board.

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
I_{CBO}	collector cut-off current	I_E = 0; V_{CB} = -30 V	-	-50	nA
I_{EBO}	emitter cut-off current	I_C = 0; V_{EB} = 6 V	-	-50	nA
h_{FE}	DC current gain	V_{CE} = -1V; I_C= -0.1mA I_C = -1mA I_C = -10mA I_C = -50mA I_C = -100mA	 60 80 100 60 30	 - - 300 - -	
V_{CEsat}	collector-emitter saturation voltage	I_C = -10mA; I_B = 1mA	-	-200	mV
		I_C = -50mA; I_B = -5mA	-	-300	mV
V_{BEsat}	base-emitter saturation voltage	I_C = -10mA; I_B = -1mA	-	-850	mV
		I_C = -50mA; I_B = -5mA	-	-950	mV
C_c	collector capacitance	I_E = I_e= 0; V_{CB} = -5 V; f = 1 MHz	-	4.5	pF
C_e	emitter capacitance	I_C = I_c= 0; V_{EB} = -500 mV; f = 1 MHz	-	10	pF
f_T	transition frequency	I_C = -10mA; V_{CE} = -20 V; f = 100MHz	250	-	MHz
NF	noise figure	I_C = -100μA; V_{CE} = -5V; R_S = 1 kΩ;f = 10Hz to15.7 kHz	-	4	dB
Switching times (between 10% and 90% levels);					
t_{on}	Turn-on time	I_{Con}= -10mA; I_{Bon} = -1mA; I_{Boff}= -1mA	-	65	ns
t_d	delay time		-	35	ns
t_r	rise time		-	35	ns
t_{off}	turn-off time		-	300	ns
t_s	storage time		-	225	ns
t_r	fall time		-	75	ns

Note Pulse test: tp≤300 ms; d≤0.02.

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified



V_{CE} = −1 V.

DC current gain; typical values.

Device	Package	Shipping
MMBT3906LT1	**SOT-23**	3000/Tape&Reel

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 LGE ***manufacturer:***

Other Similar products are found below :

619691C MCH4017-TL-H MJ15024/WS MJ15025/WS BC546/116 BC556/FSC BC557/116 BSW67A HN7G01FU-A(T5L,F,T NJVMJD148T4G NSVMMBT6520LT1G NTE187A NTE195A NTE2302 NTE2330 NTE2353 NTE316 IMX9T110 NTE63 NTE65 C4460 SBC846BLT3G 2SA1419T-TD-H 2SA1721-O(TE85L,F) 2SA1727TLP 2SA2126-E 2SB1202T-TL-E 2SB1204S-TL-E 2SC5488A-TL-H 2SD2150T100R SP000011176 FMC5AT148 2N2369ADCSM 2SB1202S-TL-E 2SC2412KT146S 2SC4618TLN 2SC5490A-TL-H 2SD1816S-TL-E 2SD1816T-TL-E CMXT2207 TR CPH6501-TL-E MCH4021-TL-E BC557B TTC012(Q) BULD128DT4 JANTX2N3810 Jantx2N5416 US6T6TR KSF350 068071B