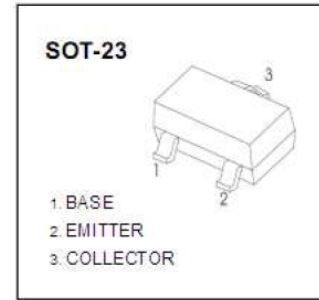


MMBT2907A (PNP)

印章/Marking: 2F

用途/Applications:

用于一般放大电路, 与 MMBT2222A 互补。



极限参数/Absolute maximum ratings (Ta=25°C)

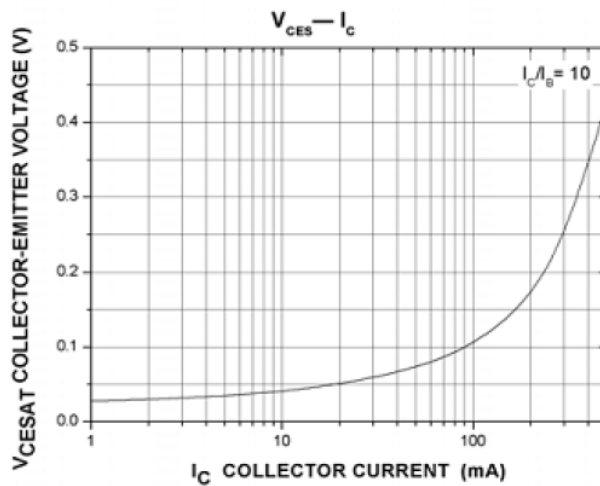
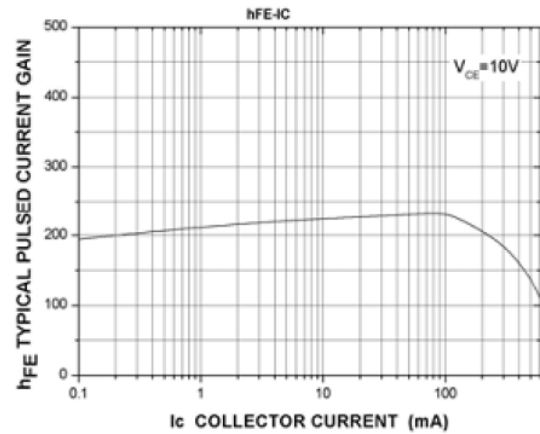
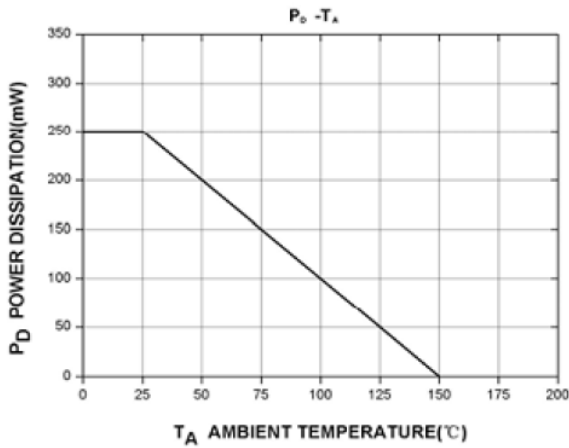
参数/Parameter	符号/Symbol	数值/Value	单位/Unit
集电极-基极电压/Collector-Base Voltage	V_{CB0}	-60	V
集电极-发射极电压/Collector-Emitter	V_{CE0}	-60	V
发射极-基极电压/Emitter-Base Voltage	V_{EB0}	-5	V
集电极连续电流/Collector Current	I_C	-0.6	A
集电极耗散功率/Collector Power	P_C	0.25	W
热阻/ Thermal Resistance Junction to	$R_{\theta JA}$	500	°C/mW
结温/Junction Temperature	T_j	250	°C
储存温度/Storage Temperature	T_{stg}	-55~150	°C

电性能参数/Electrical characteristics (Ta=25°C)

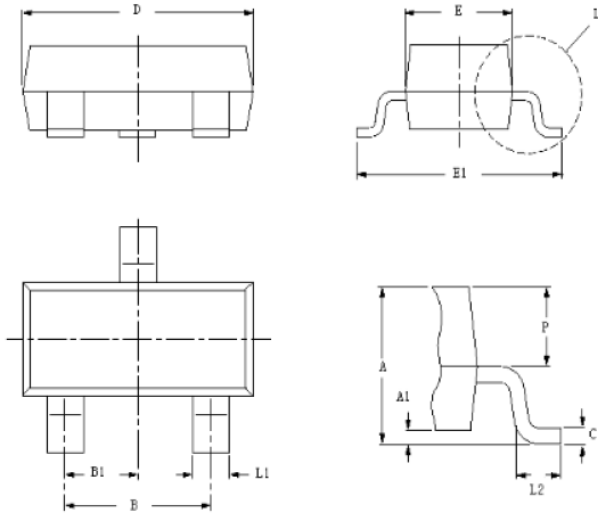
参数	符号	测试条件	最小值	最大值	单位
集电极-基极击穿电压	$V_{BR(CB0)}$	$I_C = -10 \mu A, I_E = 0$	-60		V
集电极-发射极击穿电压	$V_{BR(CE0)}$	$I_C = -10mA, I_E = 0$	-60		V
发射极-基极击穿电压	$V_{BR(EB0)}$	$I_E = -10 \mu A, I_C = 0$	-5		V
集电极截止电流	I_{CB0}	$V_{CB} = -50V, I_E = 0$		0.02	μA
发射极截止电流	I_{EB0}	$V_{EB} = -3V, I_C = 0$		0.01	μA
集电极发射极穿透电流	I_{CEX}	$V_{CE} = -30V, V_{BE(off)} = -0.5V$		0.05	μA
直流电流增益	$h_{FE(1)}$ *	$V_{CE} = -10V, I_C = -150mA$	100	300	
直流电流增益	$h_{FE(2)}$ *	$V_{CE} = -10V, I_C = -0.1mA$	75		
直流电流增益	$h_{FE(3)}$ *	$V_{CE} = -10V, I_C = -1mA$	100		
直流电流增益	$h_{FE(4)}$ *	$V_{CE} = -10V, I_C = -10mA$	100		
直流电流增益	$h_{FE(5)}$ *	$V_{CE} = -10V, I_C = -500mA$	50		
集电极-发射极饱和压降	$V_{CE(sat)}$ *	$I_C = -500mA, I_E = -50mA$		-1.6	V
集电极-发射极饱和压降	$V_{CE(sat)}$ *	$I_C = -150mA, I_E = -15mA$		-0.4	V
基极-发射极饱和压降	$V_{BE(sat)}$ *	$I_C = -500mA, I_E = -50mA$		-2.6	V
基极-发射极饱和压降	$V_{BE(sat)}$ *	$I_C = -150mA, I_E = -15mA$		-1.3	V
特征频率	f_T	$V_{CE} = -20V, I_C = -50mA, f = 100MHz$	200		MHz
延迟时间	t_d	$V_{CC} = -30V, V_{BE(off)} = -0.5V,$ $I_C = -150mA, I_{B1} = -15mA$		10	nS
上升时间	t_r			25	nS
存储时间	t_s	$V_{CC} = -30V, I_C = -150mA,$ $I_{B1} = -I_{B2} = -15mA$		225	nS
下降时间	t_f			60	nS

*Pulse test: Pulse Width $\leq 300 \mu S$, Duty Circle $\leq 2.0\%$

典型特性曲线图/Typical Characteristics



SOT-23 Package Outline Dimensions



Symbol	Dim in mm	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
L1	0.350	0.500
C	0.090	0.150
D	2.800	3.000
E	1.250	1.350
E1	2.250	2.550
B	1.800	2.000
B1	0.950 TYP	
L2	0.200	0.450
P	0.550	0.600

Mold Surface roughness: < 4um

SOT-23 Tape and Reel

PKG TYPE	W	P	E	F	D	D1	Po	Po10	P2	A0	B0	K0	T
SOT-23	8.00	4.00	1.75	3.50	1.50	1.00	4.00	40.00	2.00	3.15	2.77	1.22	0.20
Tolerance	+0.3/-0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.2	±0.05	±0.1	±0.1	±0.1	±0.02

