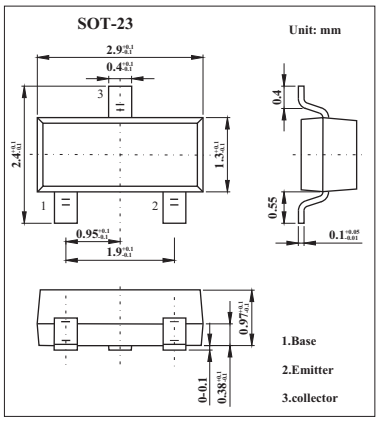
PNP General Purpose Amplifier

MMBT2907A



Features

Epitaxial Planar Die Construction

Complementary NPN Type Available(MMBT2222A)

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-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, Junction to Ambient	$R_{\theta JA}$	500	℃/ W
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-55 to +150	℃

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Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = -10 μA, I_E = 0	-60		V
Collector-Emitter Breakdown Voltage*	$V_{(BR)CEO}$	I_C = -10 mA, I_B = 0	-60		V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = -10 μA, I_C = 0	-5		V
Collector Cutoff Current	I_{CBO}	V_{CB} = -50 V, I_E = 0		-20	nA
Collector Cutoff Current	I_{CEX}	V_{CE} = -30 V,$V_{BE(off)}$ =-0.5V		-50	nA
DC Current Gain	h_{FE}	V_{CE}=-10V,I_C=-0.1mA	75		
		V_{CE}=-10V,I_C=-1mA	100		
		V_{CE}=-10V,I_C=-10mA	100		
		V_{CE}=-10V,I_C=-150mA	100	300	
		V_{CE}=-10V,I_C=-500mA	50		
Collector-Emitter Saturation Voltage *	$V_{CE(sat)}$	I_C = -150 mA, I_B = -15 mA		-0.4	V
		I_C = -500 mA, I_B = -50 mA		-1.6	V
Base-Emitter Saturation Voltage *	$V_{BE(sat)}$	I_C = -150 mA, I_B = -15 mA		-1.3	V
		I_C = -500 mA, I_B = -50 mA		-2.6	V
Current Gain - Bandwidth Product	f_T	V_{CE}=-20V,I_C=-50mA,f=100MHz	200		MHz
Delay Time	t_d	V_{CC} = -30 V, I_C = -150 mA,I_{B1} = -15 mA		10	ns
Rise Time	t_r			40	ns
Storage Time	t_s	V_{CC} = -6.0 V, I_C = -150 mA,I_{B1} = I_{B2} = -15 mA		80	ns
Fall Time	t_f			30	ns

* Pulse test: Pulse width 300 μs, duty cycle 2.0%

Marking

Marking	2F