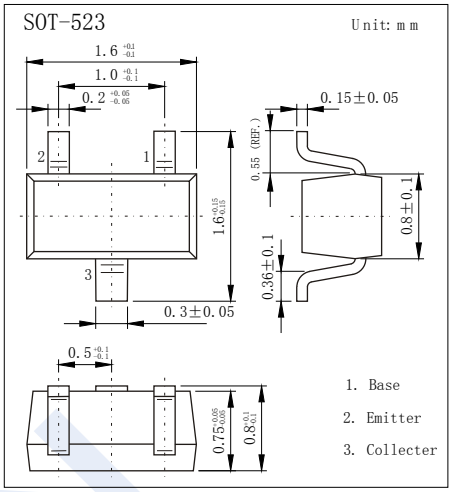
PNP Transistors

MMBT2907AT (KMBT2907AT)



■ Features

- Small Package
- Complementary to MMBT2222AT

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-60	V
Collector - Emitter Voltage	V_{CEO}	-60	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-600	mA
Collector Power Dissipation	P_C	150	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	833	°C/W
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E= 0	-60			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -10 mA, I_B= 0	-60			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C= 0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -50 V , I_E= 0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V , I_C=0			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-150 mA, I_B=-15mA			-0.4	V
		I_C= -500 mA, I_B= -50mA			-1.6	
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-150 mA, I_B=-15mA			-1.3	
		I_C= -500 mA, I_B= -50mA			-2.6	
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			
Delay time	t_d	V_{CC}=-30V,I_C=-150mA, I_{B1}=-15mA			10	nS
Rise time	t_r				40	
Storage time	t_s	V_{CC}=6V, I_C=-150mA, I_{B1}=I_{B2}=-15mA			225	
Fall time	t_f				30	
Emitter input capacitance	C_{ib}	V_{EB}= -2V, I_C= 0,f=1MHz			30	pF
Collector output capacitance	C_{ob}	V_{CB}= -10V, I_E= 0,f=1MHz			8	
Transition frequency	f_T	V_{CE}= -20V, I_C= -50mA,f=100MHz	200			MHz

■ Marking

Marking	2F