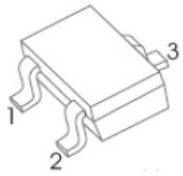
SOT-323 Plastic-Encapsulate Transistors

MMST2907A TRANSISTOR (PNP)

SOT-323



1. BASE
2. EMITTER
3. COLLECTOR

FEATURES

- **Epitaxial planar die construction**
- **Complementary PNP Type available(MMST2222A)**

MARKING:K3F

MAXIMUM RATINGS(T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.6	A
P_C	Collector Dissipation	0.2	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55 to +150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-10μA,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=-10μA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-50V,I_E=0			-100	n A
Collector cut-off current	I_{CES}	V_{CB}=-30V,I_B=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-3V,I_C=0			-100	nA
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			
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	-0.6		-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
Output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=0.1MHz			8	pF
Input capacitance	C_{ib}	V_{EB}=-2V,I_C=0,f=0.1MHz			30	pF
Delay time	t_d	V_{CC}=-30V,$V_{BE(off)}$=-1.5V,I_C=-150mA I_{B1}==- 15mA			10	ns
Rise time	t_r				40	ns
Storage time	t_S	V_{CC}=-30V,I_C=-150mA,I_{B1}=-I_{B2}=-15mA			80	ns
Fall time	t_f				30	ns