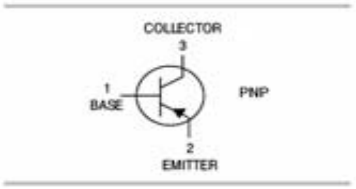
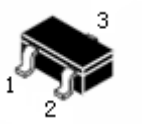
PNP Silicon Epitaxial Planar Transistor **MMST2907A**

FEATURES

- Power dissipation.(P_C=200mW)
- Epitaxial planar die construction.
- Complementary NPN type MMST2222A.

Lead-free





SOT-323

APPLICATIONS

- General purpose application.

ORDERING INFORMATION

Type No.	Marking	Package Code
MMST2907A	K3F	SOT-323

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
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	-600	mA
P_C	Collector Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance,Junction to Ambient	625	℃/W
T_j,T_{stg}	Junction and Storage Temperature	-55 to +150	℃

PNP Silicon Epitaxial Planar Transistor **MMST2907A**

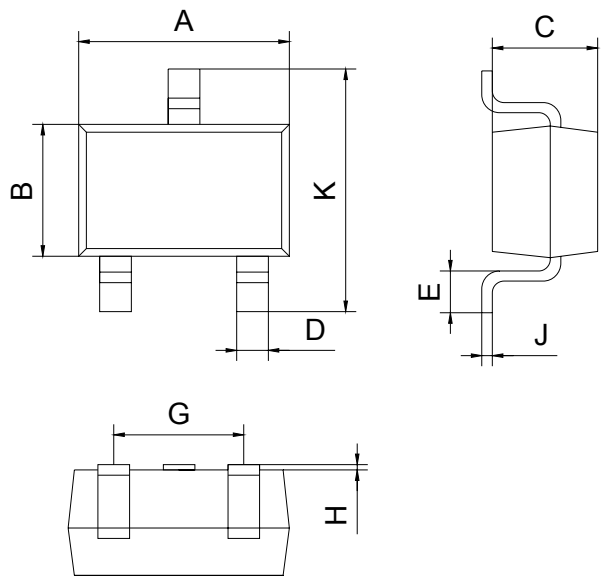
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Test conditions**	**MIN**	**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		-10	nA
Collector cut-off current	I_{CEX}	V_{CE}=-30V,$V_{EB(OFF)}$=-0.5V		-50	nA
Base cut-off current	I_{BL}	V_{CE}=-30V,$V_{EB(OFF)}$=-0.5V		-50	nA
DC current gain	h_{FE}	V_{CE}=-10V,I_C=-0.1mA V_{CE}=-10V,I_C=-1.0mA V_{CE}=-10V,I_C=-10mA V_{CE}=-10V,I_C=-150mA V_{CE}=-10V,I_C=-500mA	75 100 100 100 50	 300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-150mA, I_B=-15mA I_C=-500mA, I_B=-50mA		-0.4 -1.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-150mA, I_B=-15mA I_C=-500mA, I_B=-50mA		-1.3 -2.6	V
Transition frequency	f_T	V_{CE}=-20V, I_C= -50mA f=100MHz	200		MHz
Collector output capacitance	C_{obo}	V_{CB}=-10V,I_E=0,f=1MHz		8	pF
Collector input capacitance	C_{ibo}	V_{EB}=-2.0V,I_C=0,f=1MHz		30	pF
Turn-on time	t_{on}	V_{CC}=-30V,I_C=-150mA, I_{B1}=-15mA		45	nS
Delay time	t_d			10	nS
Rise time	t_r			40	nS
Turn-off time	t_{off}	V_{CC}=-6.0V,I_C=-150mA, I_{B1}=I_{B2}=-15mA		100	nS
Storage time	t_s			80	nS
Fall time	t_f			30	nS

PNP Silicon Epitaxial Planar Transistor **MMST2907A**

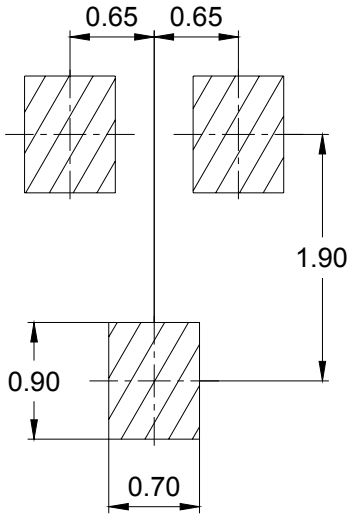
PACKAGE OUTLINE

Plastic surface mounted package SOT-323



SOT-323		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.95 Typical	
D	0.30 Typical	
E	0.25	0.40
G	1.2	1.4
H	0.02	0.10
J	0.10 Typical	
K	2.20	2.40
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMST2907A	SOT-323	3000/Tape&Reel