

MMST2907A

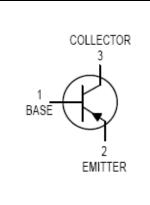
PNP General Purpose Transistor

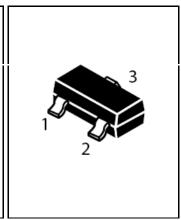
FEATURES

- Ideal for Medium Power Amplification and Switching
- Complementary PNP Type available(MMST2222A)

MECHANICAL DATA

- Case: SOT-323 Plastic
- Case material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Lead Free in RoHS 2002/95/EC Compliant





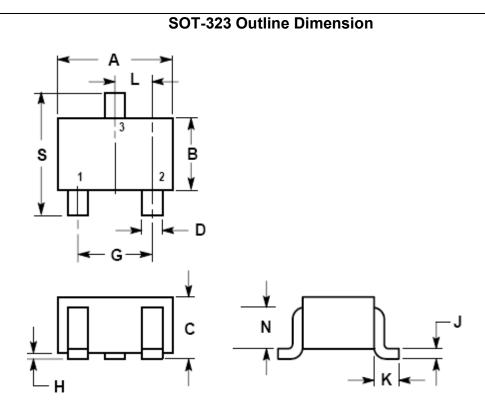
Maximum Ratings @ $T_A = 25^{\circ}C$

Characteristic	Symbol	Value	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	Ic	-600	mA
Collector Power Dissipation	P _C	200	mW
Thermal Resistance, junction to Ambient	R⊕JA	500	°C/W
Junction Temperature	TJ	150	°C
Storage Temperature Range	T _{STG}	-55~+150	$^{\circ}\mathbb{C}$

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	Min.	Тур.	Max.	Unit
Collector-base breakdown voltage	I _C =-10μΑ,I _E =0	V _{CBO}	-60			V
Collector-emitter breakdown voltage	I _C =-10mA,I _B =0	V_{CEO}	-60			V
Emitter-base breakdown voltage	I _E =-10μA,I _C =0	V _{EBO}	-5			V
Collector-base cut-off current	V _{CB} =-50V,I _E =0	I _{CBO}			-100	nA
Collector-emitter cut-off current	V_{CE} =-30V, I_{B} =0	I _{CEO}			-100	nA
Emitter-base cut-off current	V_{EB} =-3 V , I_{C} =0	I _{EBO}			-100	nA
DC current gain	V_{CE} =-10V, I_{C} =-0.1mA	h _{FE1}	75			
	V _{CE} =-10V,I _C =-1mA	h _{FE2}	100			
	V _{CE} =-10V,I _C =-10mA	h _{FE3}	100			
	V _{CE} =-10V,I _C =-150mA	h _{FE4}	100		300	
	V _{CE} =-10V,I _C =-500mA	h _{FE5}	50			
Collector-emitter saturation voltage	I _C =-150mA,I _B =-15mA	V _{CE} (sat)1			-0.4	V
	I _C =-500mA,I _B =-50mA	V _{CE} (sat)2			-1.6	V
Base-emitter saturation voltage	I _C =-150mA,I _B =-15mA	V _{BE} (sat)1			-1.3	V
	I _C =-500mA,I _B =-50mA	V _{BE} (sat)2			-2.6	V
Transition frequency	V _{CE} =-20V,I _C =-50mA, f=100MHz	f _T	200			MHz
Output capacitance	V _{CB} =-10V,I _E =0,f=0.1MHz	C _{obo}			8	pF
Input capacitance	V _{EB} =-2V,I _C =0,f=0.1MHz	Cib			30	pF
Delay time	V _{CC} =-30V, V _{BE(off)} =-1.5V,	T _d			10	nS
Rise time	I _C =-150mA , I _{B1} =-15mA	T _r			40	nS
Storage time	V _{CC} =-30V, I _C =-150mA	Ts			80	nS
Fall time	I _{B1} =-I _{B2} =-15mA	T _f	-		30	nS

REV. 3, Jan-2013, KSPR18

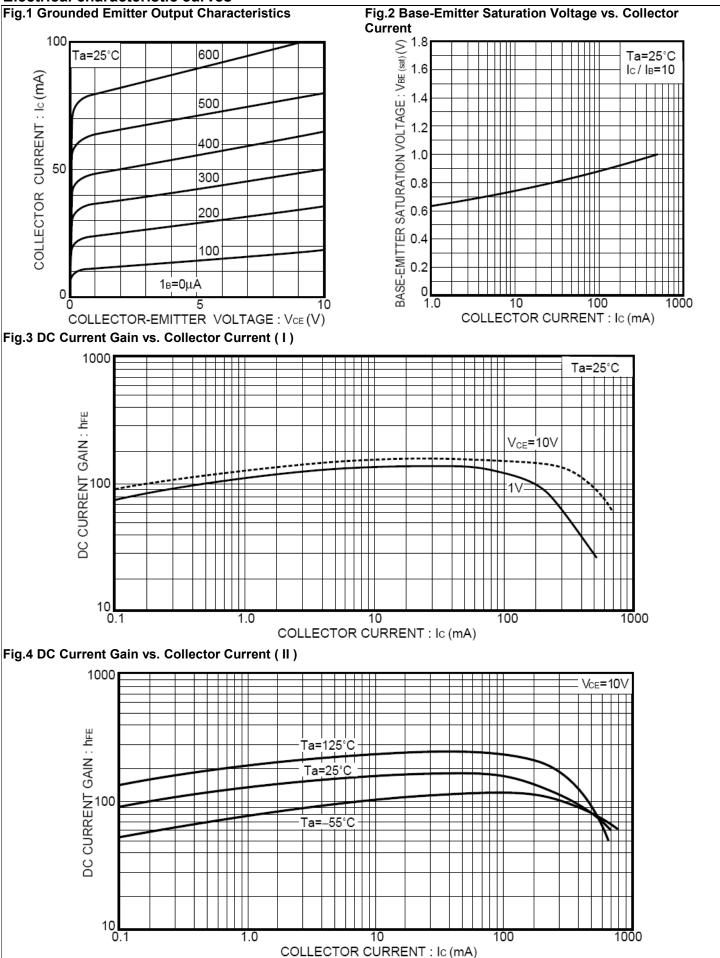


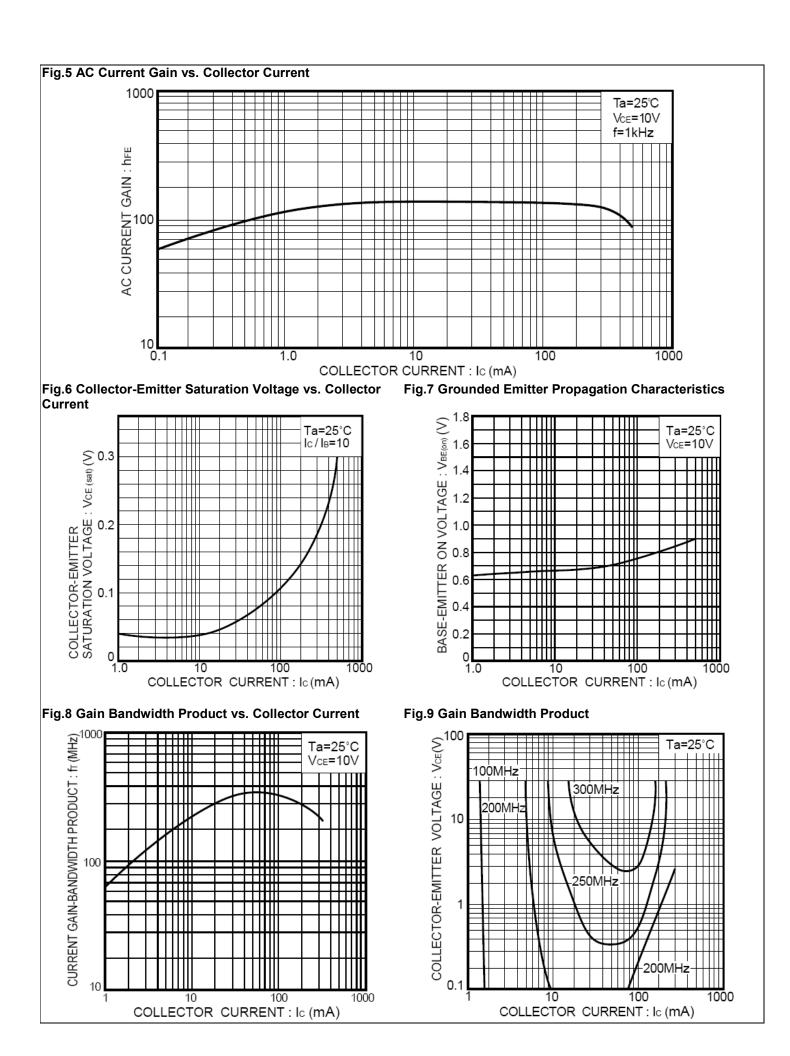
Symbol	Dimension In Millimeters			
Syllibol	Min	Max.		
Α	1.80	2.20		
В	1.15	1.35		
С	0.80	1.00		
D	0.30	0.40		
G	1.20	1.40		
Н	0.00	0.10		
J	0.10	0.25		
K	0.425 REF			
L	0.650 BSC			
N	0.700 REF			
S	2.00	2.40		

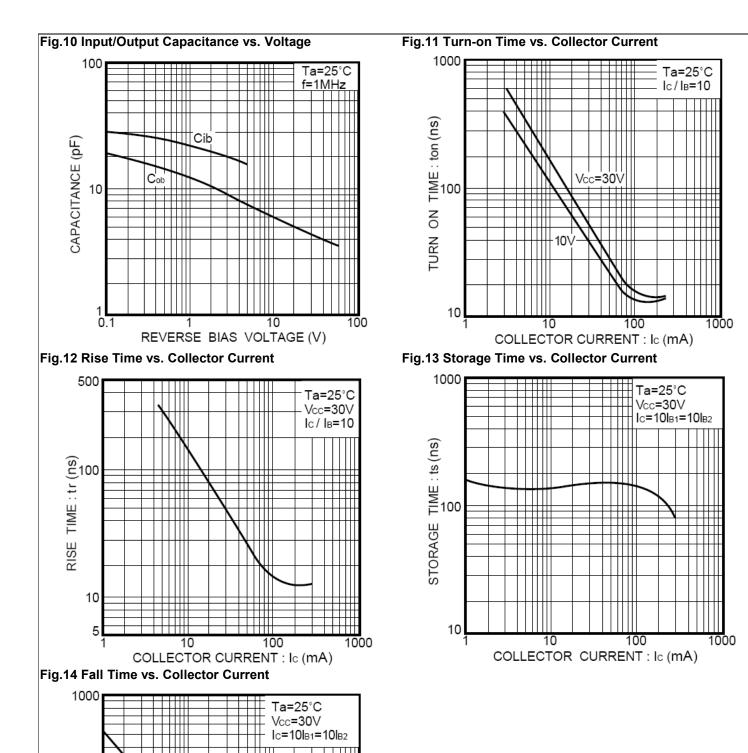
Device Marking:

Device P/N	Marking code
MMST2907A	20

Electrical characteristic curves







. TIME : tf (ns)

FALL

10

100

COLLECTOR CURRENT: Ic (mA)

1000



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New Marking Rule Notification

Range: In order to have well management in process control, the new marking rule is applied to small signal device including Switching Diode, Transistor and Schottky Diode.

Package: SOT-23 / SOT-323 / SOT-523

