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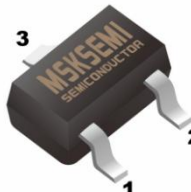

MMST5401

Product specification

FEATURES

- Complementary to MMST5551
- Small Surface Mount Package
- Ideal for Medium Power Amplification and Switching

Reference News

PACKAGE OUTLINE	MARKING
 <div style="border: 1px solid black; padding: 5px; margin-left: 10px;"> 1. BASE 2. EMITTER 3. COLLECTOR </div> <p style="text-align: center;">SOT-323</p>	

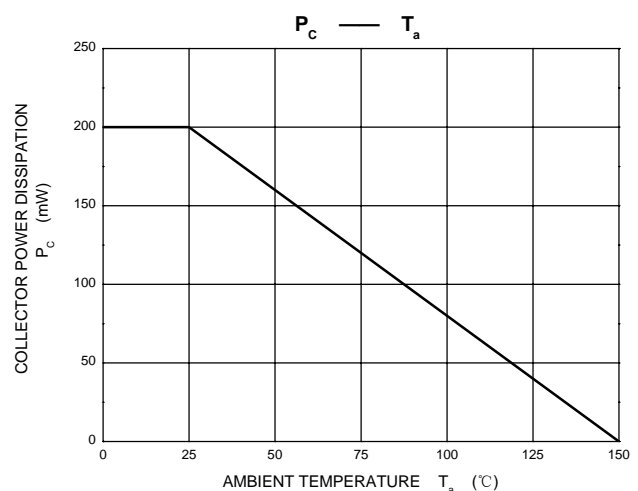
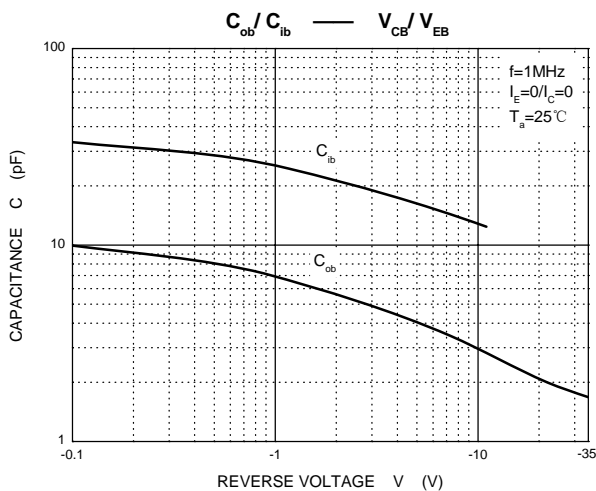
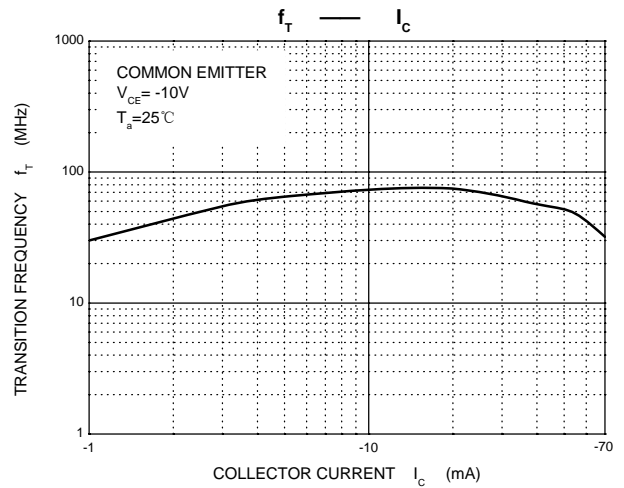
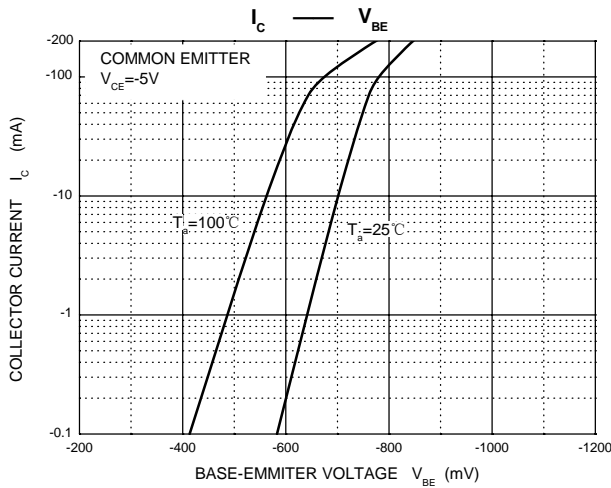
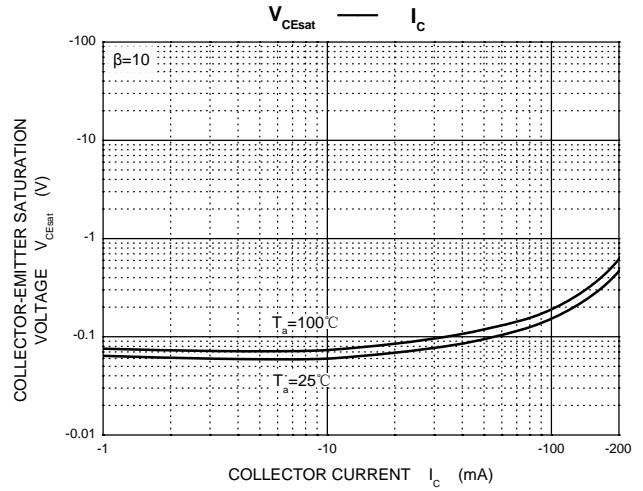
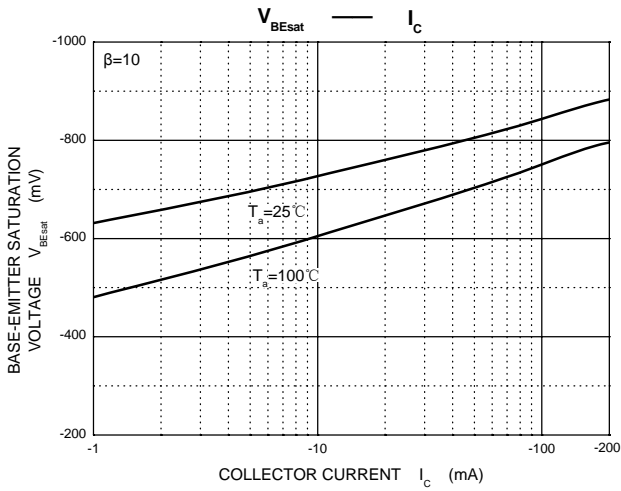
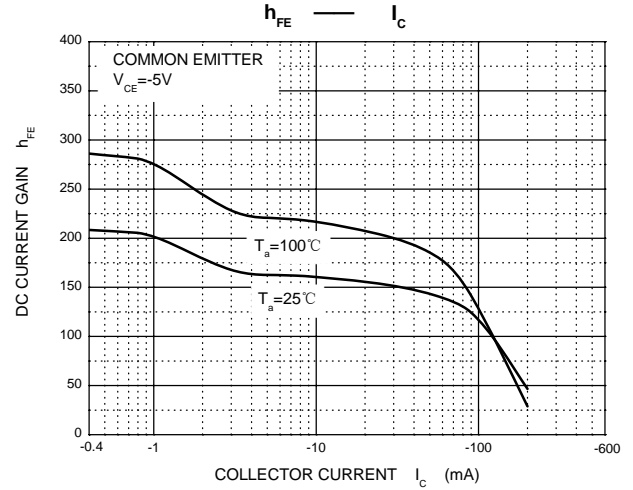
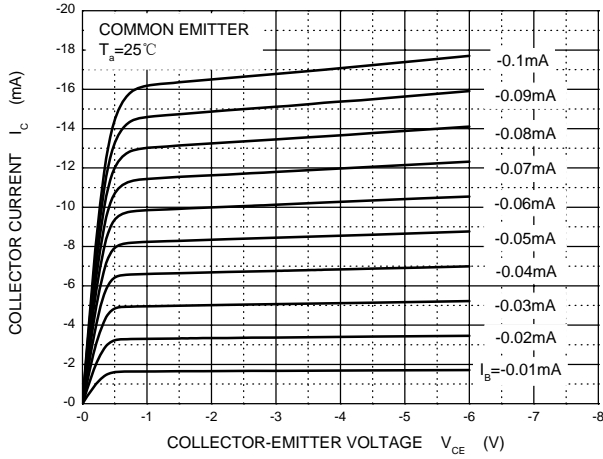
MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-160	V
V _{CEO}	Collector-Emitter Voltage	-150	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-600	mA
P _C	Collector Power Dissipation	200	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	625	°C/W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55 ~ +150	°C

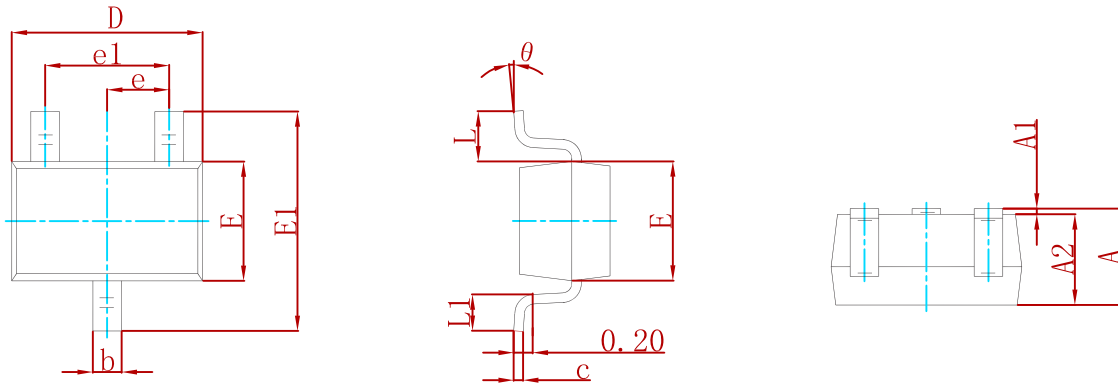
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA, I _E =0	-160			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	-150			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-10μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-120V, I _E =0			-50	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-3V, I _C =0			-50	nA
DC current gain	h _{FE}	V _{CE} =-5V, I _C =-1mA	50			
		V _{CE} =-5V, I _C =-10mA	100		300	
		V _{CE} =-5V, I _C =-50mA	50			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-50mA, I _B =-5mA			-0.5	V
		I _C =-10mA, I _B =-1mA			-0.2	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =-50mA, I _B =-5mA			-1	V
		I _C =-10mA, I _B =-1mA			-1	V
Transition frequency	f _T	V _{CE} =-10V, I _C =-10mA, f=100MHz	100			MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			6	pF

Static Characteristic

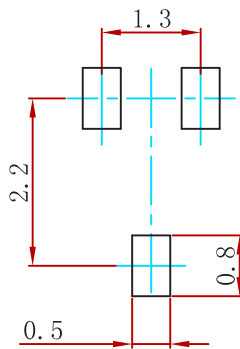


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
MMST5401	SOT-323	3000

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