

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

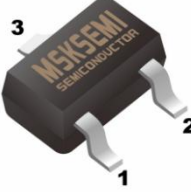

## MMST4403

Product specification

## FEATURES

- Complementary To MMST4401
- Small Surface Mount Package

## Reference News

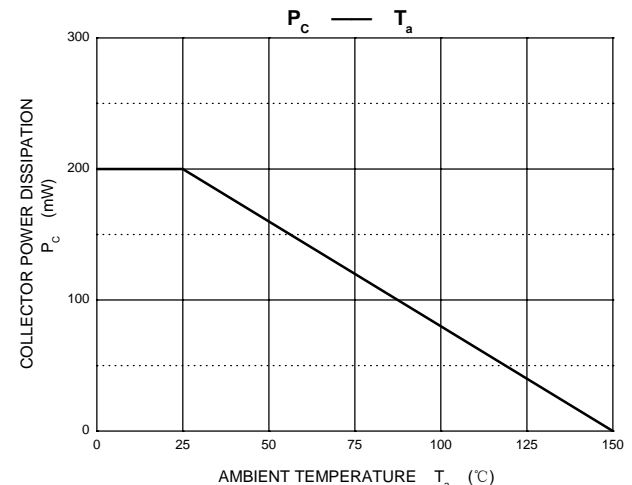
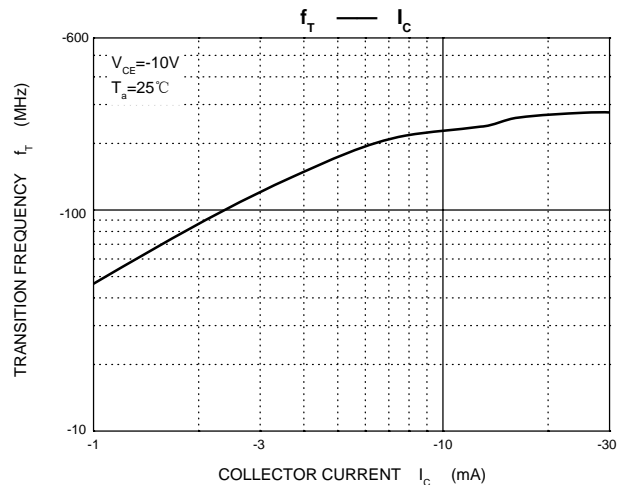
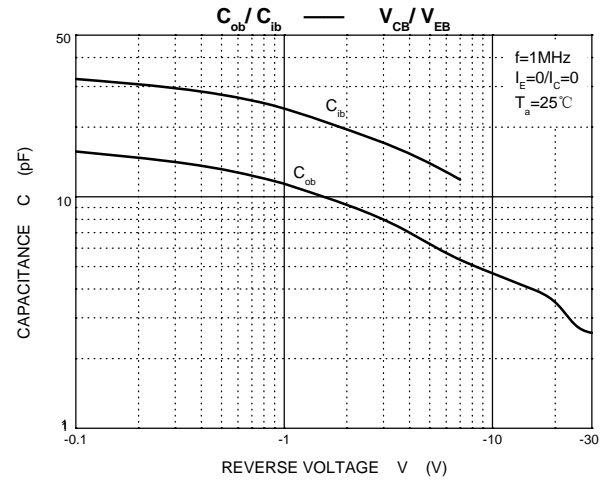
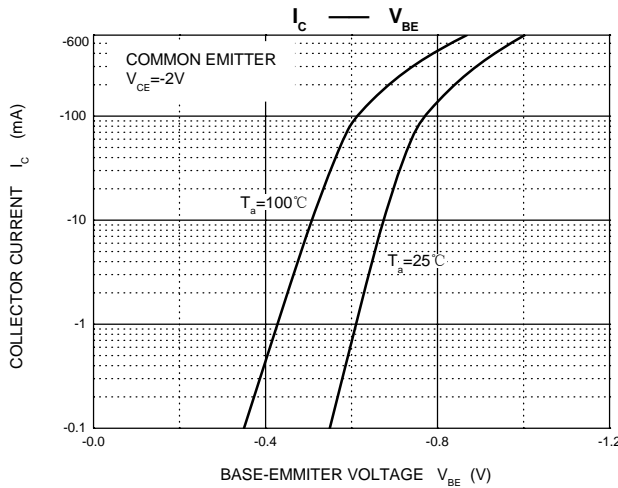
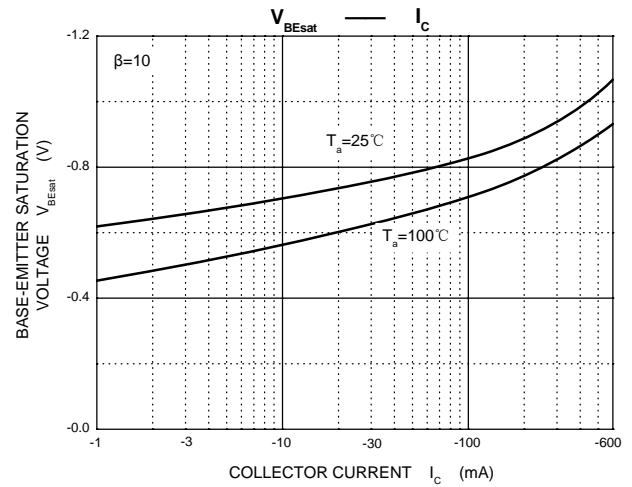
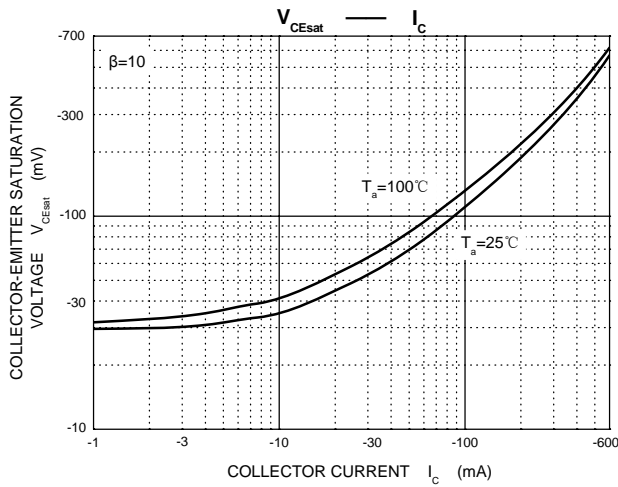
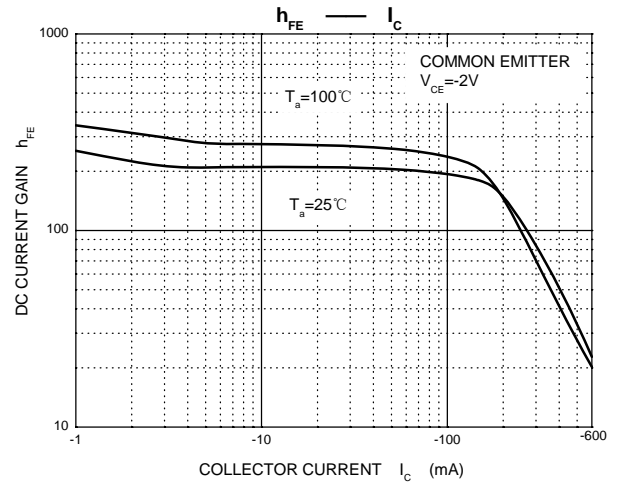
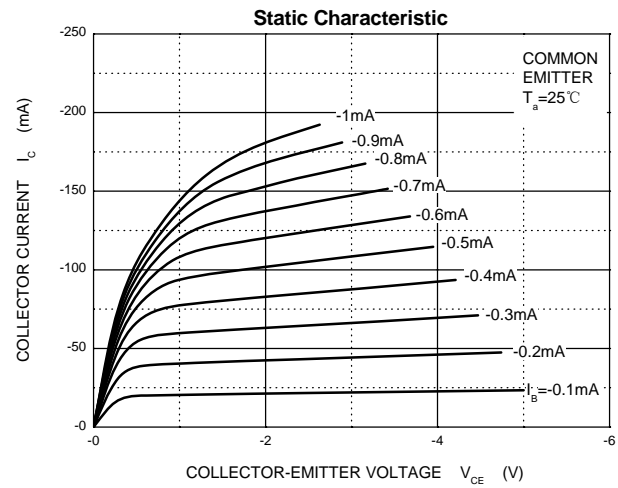
PACKAGE OUTLINE	MARKING
 <div>           1. BASE            2. EMITTER            3. COLLECTOR         </div>	
SOT-323	

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

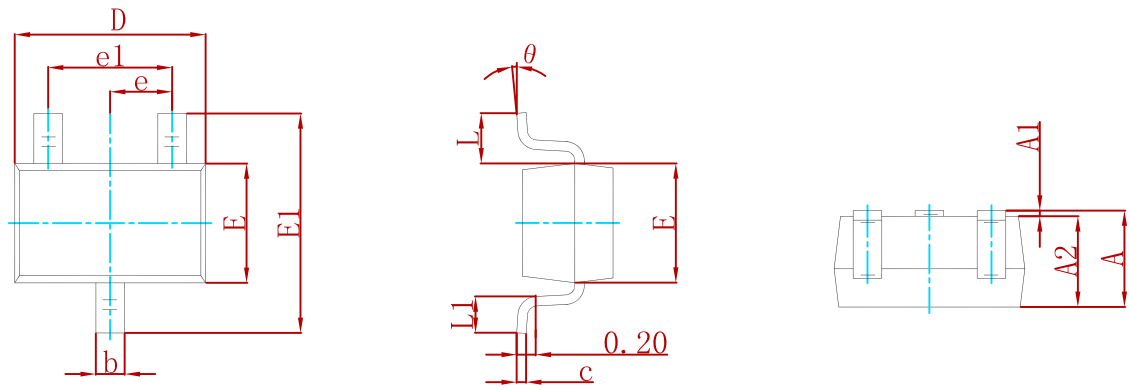
Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	-40	V
$V_{CEO}$	Collector-Emitter Voltage	-40	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current	-600	mA
$P_C$	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	°C/W
$T_J, T_{stg}$	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	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -35V, I_E = 0$			-100	nA
Collector cut-off current	$I_{CEX}$	$V_{CE} = -35V, V_{BE} = -0.4V$			-100	nA
DC current gain	$h_{FE}$	$V_{CE} = -1V, I_C = -100\mu A$	30			
		$V_{CE} = -1V, I_C = -1mA$	60			
		$V_{CE} = -1V, I_C = -10mA$	100			
		$V_{CE} = -2V, I_C = -150mA$	100		300	
		$V_{CE} = -2V, I_C = -500mA$	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -150mA, I_B = -15mA$			-0.4	V
		$I_C = -500mA, I_B = -50mA$			-0.75	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -150mA, I_B = -15mA$	-0.75		-0.95	V
		$I_C = -500mA, I_B = -50mA$			-1.3	V
Transition frequency	$f_T$	$V_{CE} = -10V, I_C = -20mA, f = 100MHz$	200			MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$			8.5	pF

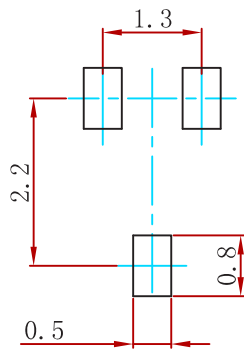


PACKAGE MECHANICAL DATA



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:±0.05mm.  
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
MMST4403	SOT-323	3000

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