



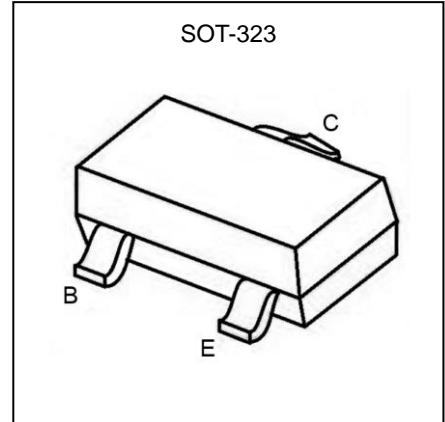
GP
ELECTRONICS

MMST4403

MMST4403 Transistor(PNP)

Feature

- Small Surface Mount Package

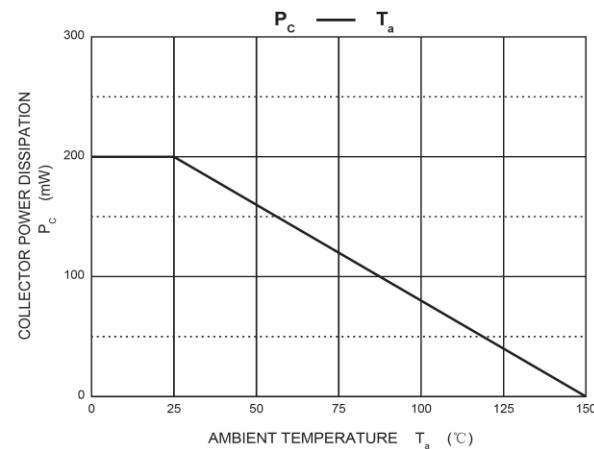
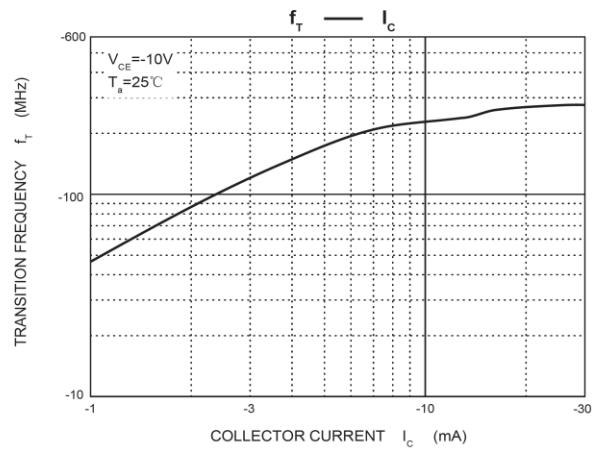
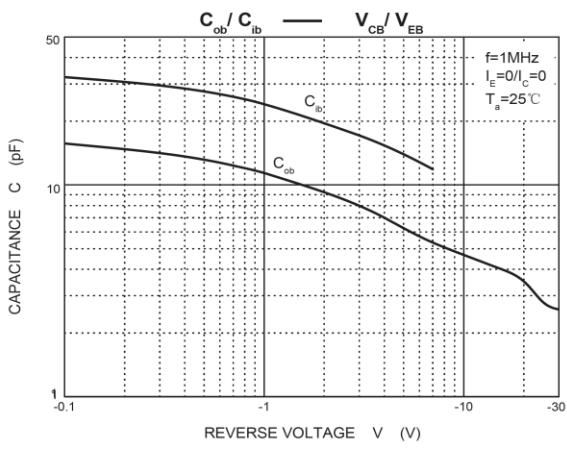
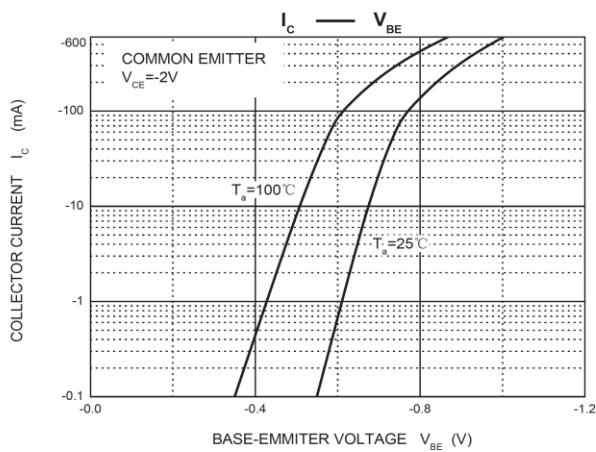
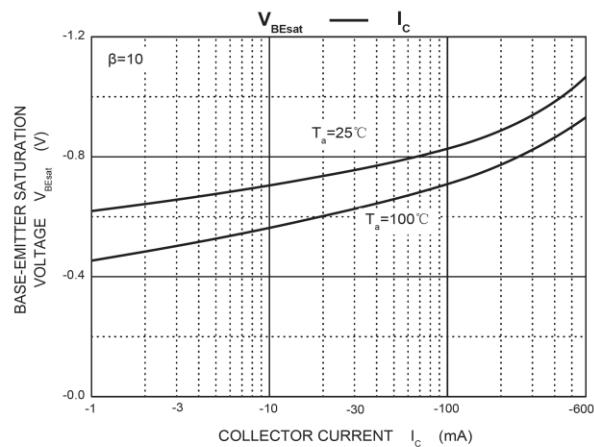
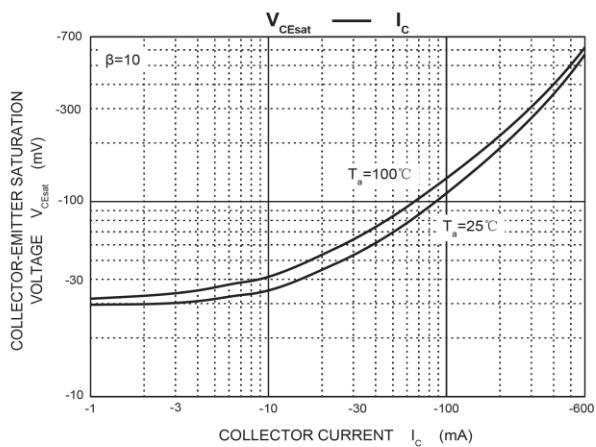
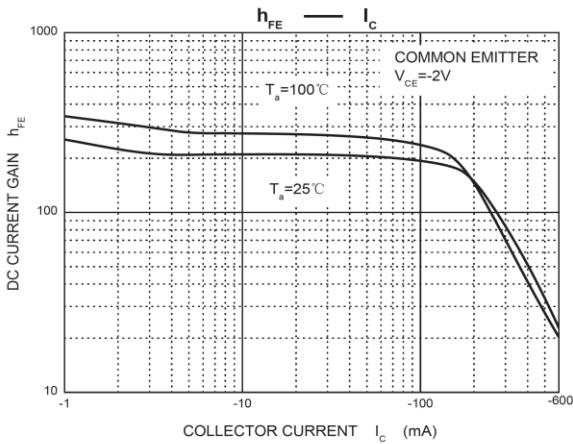
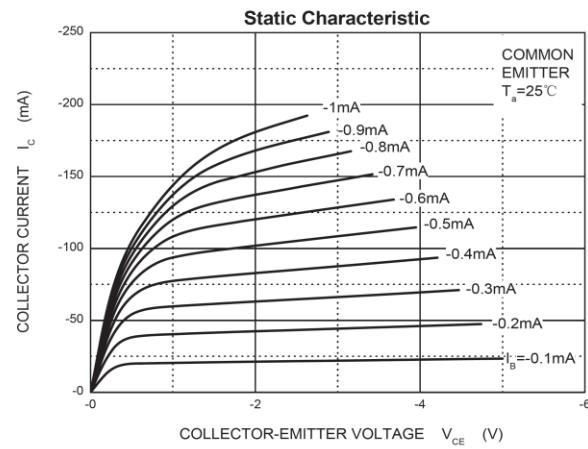


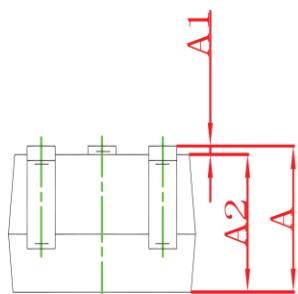
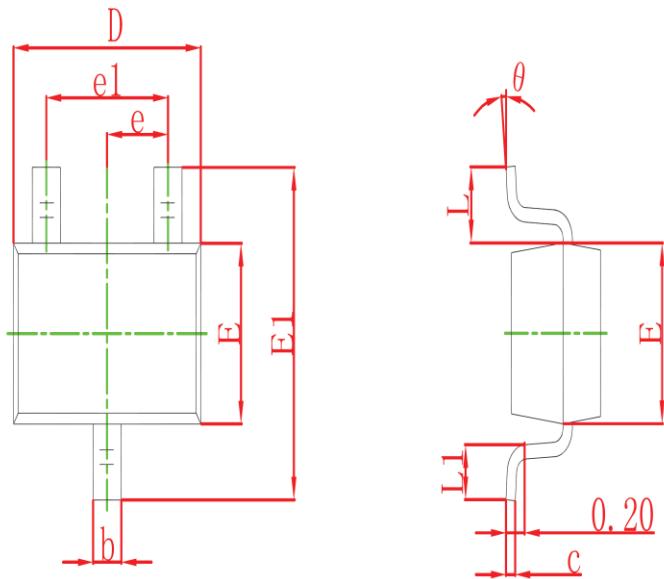
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_c	-0.6	A
Power Dissipation	P_d	0.2	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^\circ\text{C}$

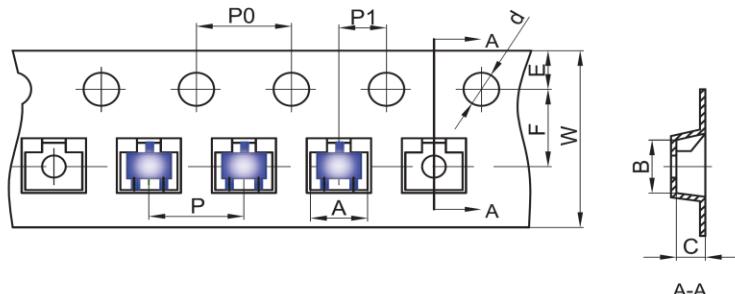
ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_E=0$	-40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CE}=-35\text{V}, I_E=0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=-35\text{V}, V_{EB}=-0.4\text{V}$		-0.1	μA
DC current gain	h_{FE1}	$V_{CE}=-1\text{V}, I_C=-0.1\text{mA}$	30		
	h_{FE2}	$V_{CE}=-1\text{V}, I_C=-1\text{mA}$	60		
	h_{FE3}	$V_{CE}=-1\text{V}, I_C=-10\text{mA}$	100		
	h_{FE4}	$V_{CE}=-2\text{V}, I_C=-150\text{mA}$	100		300
	h_{FE5}	$V_{CE}=-2\text{V}, I_C=-500\text{mA}$	20		
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C=-150\text{mA}, I_B=-15\text{mA}$		-0.4	V
		$I_C=-500\text{mA}, I_B=-50\text{mA}$		-0.75	V
Base-emitter saturation voltage	$V_{BE(\text{sat})}$	$I_C=-150\text{mA}, I_B=-15\text{mA}$	-0.75	-0.95	V
		$I_C=-500\text{mA}, I_B=-50\text{mA}$		-1.3	V
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_C = -20\text{mA}, f = 100\text{MHz}$	200		MHZ

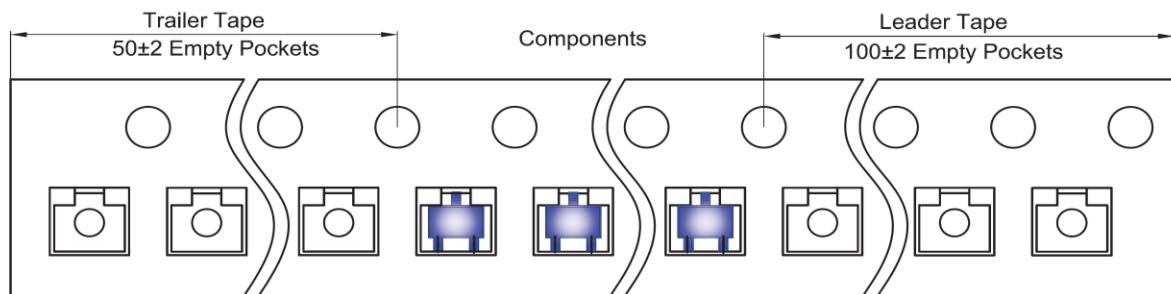
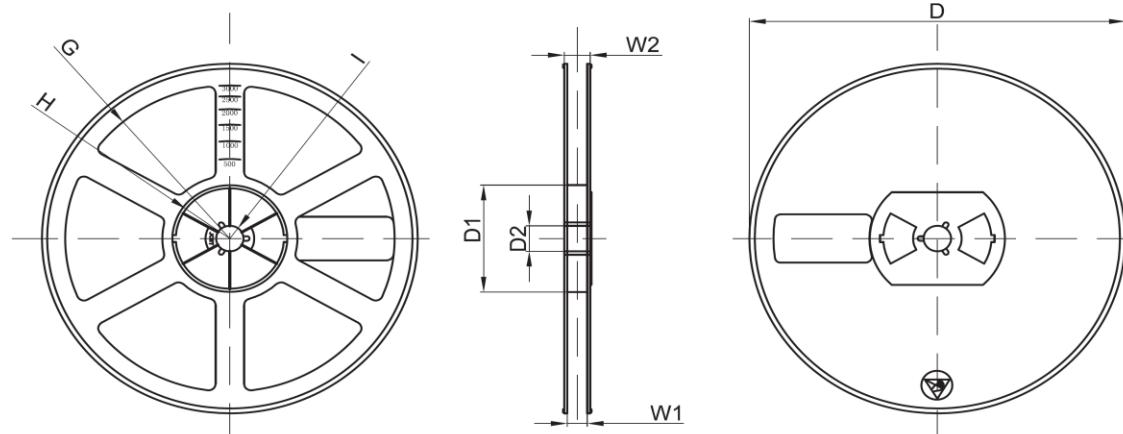
Typical Characteristics


SOT-323 Package Information


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°

SOT-323 Tape and Reel
SOT-323 Embossed Carrier Tape


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-323	2.25	2.55	1.19	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

SOT-323 Tape Leader and Trailer

SOT-323 Reel


Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	