JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-323 Plastic-Encapsulate Transistors

MMST4401 TRANSISTOR (NPN)

FEATURES

Power dissipation

$P_{CM:}$ 0.2 W (Tamb=25℃)

Collector current

I_{CM}: 0.6 A

Collector-base voltage

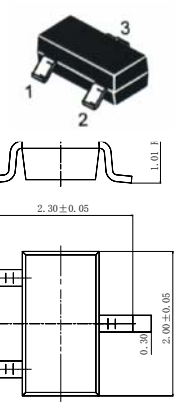
$V_{(BR)CBO}$: 60 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

SOT-323

1. BASE
2. EMITTER
3. COLLECTOR



Unit: mm

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=100μA , I_E=0	60		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=100μA, I_C=0	6		V
Collector cut-off current	I_{CBO}	V_{CB}=35V, I_E=0		0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=35V, I_B=0		0.5	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V, I_C=0		0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=1V, I_C= 0.1mA	20		
	$h_{FE(2)}$	V_{CE}=1V, I_C=1mA	40		
	$h_{FE(3)}$	V_{CE}=1V, I_C= 10mA	50		
	$h_{FE(2)}$	V_{CE}=1V, I_C=150mA	100	300	
	$h_{FE(1)}$	V_{CE}=2V, I_C= 500mA	40		
Collector-emitter saturation voltage	$V_{CE(sat)1}$	I_C=150 mA, I_B=15mA		0.4	V
	$V_{CE(sat)2}$	I_C=500 mA, I_B=50mA		0.75	V
Base-emitter saturation voltage	$V_{BE(sat)1}$	I_C=150 mA, I_B=15mA		0.95	V
	$V_{BE(sat)2}$	I_C=500 mA, I_B=50mA			V
Transition frequency	f_T	V_{CE}= 10V, I_C= 20mA, f=100MHz	250		MHz
Output Capacitance	C_{ob}	V_{CB}=5V, I_E= 0, f=1MHz		6.5	pF
Delay time	t_d	V_{CC}=30V, V_{BE}=2V I_C=150mA, I_{B1}=15mA		15	nS
Rise time	t_r			20	nS
Storage time	t_S	V_{CC}=30V, I_C=150mA I_{B1}= I_{B2}= 15mA		225	nS
Fall time	t_f			30	nS

Marking: K3X