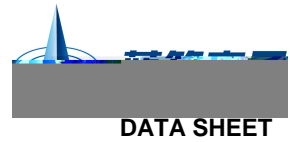


MMBT4401

Rev.B Dec.-2021



SOT-23

NPN

Silicon NPN transistor in a SOT-23 Plastic Package.

1 ESD

4kV, 400V



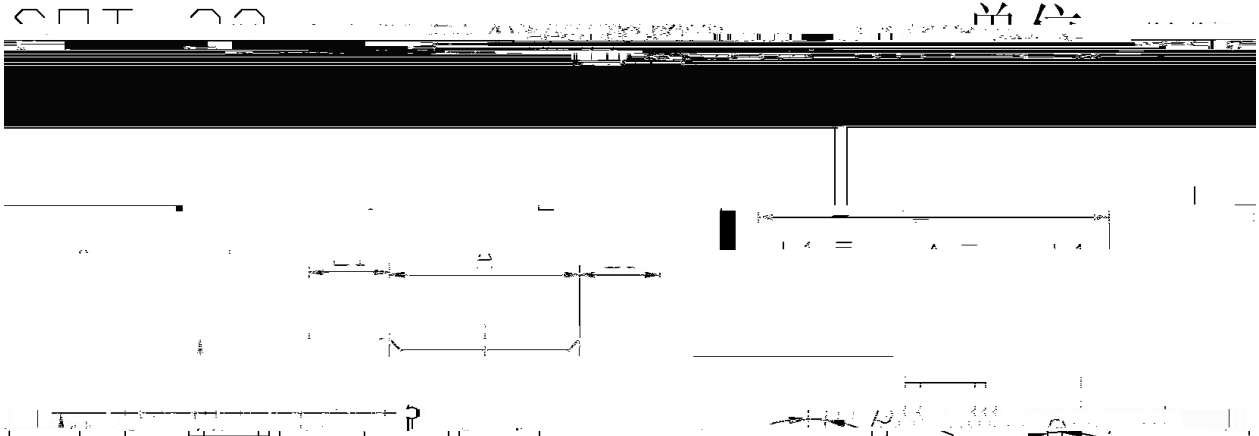
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	40	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	600	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0mA$ $I_B=0$	40			V
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=0.1mA$ $I_E=0$	60			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=0.1mA$ $I_C=0$	6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=60V$ $I_E=0$			50	nA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=6.0V$ $I_C=0$			50	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0V$ $I_C=150mA$	100		300	
	$h_{FE(2)}$	$V_{CE}=2.0V$ $I_C=500mA$	40			
	$h_{FE(3)}$	$V_{CE}=1.0V$ $I_C=10mA$	80			
	$h_{FE(4)}$	$V_{CE}=1.0V$ $I_C=1.0mA$	40			
	$h_{FE(5)}$	$V_{CE}=1.0V$ $I_C=0.1mA$	20			

Collector-Emitter Saturation Voltage

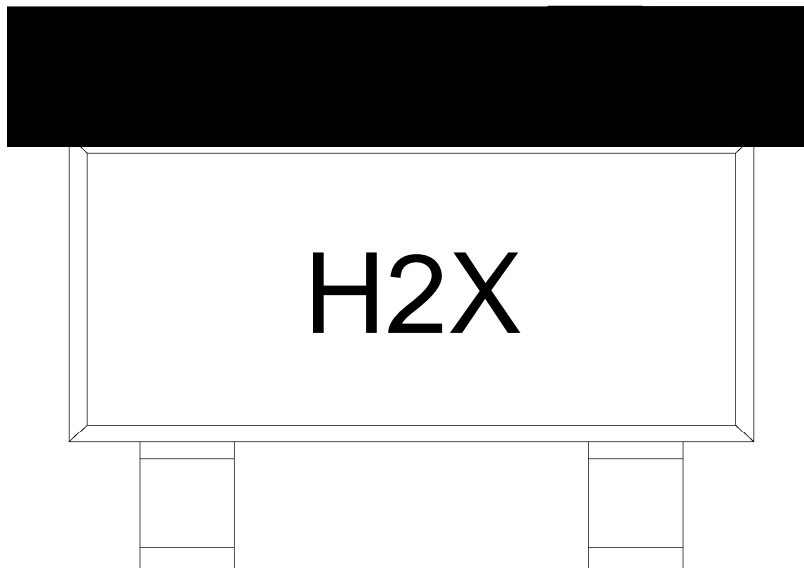
$V_{CE(sat)} (1)$

/ Package Dimensions



Dimensions In Millimeters		Dimensions In Millimeters		Dimensions In Millimeters	
Symbol	Max	Symbol	Max	Symbol	Max
A	2.7	B	1.30	C	2.2
D	0.65	E	0.90	F	0.45
G	0.15	H	0.15	I	0.05
J	0.10	K	0.10	L	0.10
M	0.10	N	0.10	O	0.10
P	0.10	Q	0.10	R	0.10
S	0.10	T	0.10	U	0.10
V	0.10	W	0.10	X	0.10
Y	0.10	Z	0.10		

/ Marking Instructions



H

2X

Note:

H Company Code

2X Product Type Code

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

- 1 : 150 180 , 60 90sec;
- 2 245±5 , 5±0.5sec;

Note:
1. Pre-heat in 100~180°C, Time 60-90sec.
