

n

Silicon NPN transistor in a SOT-23 Plastic Package.

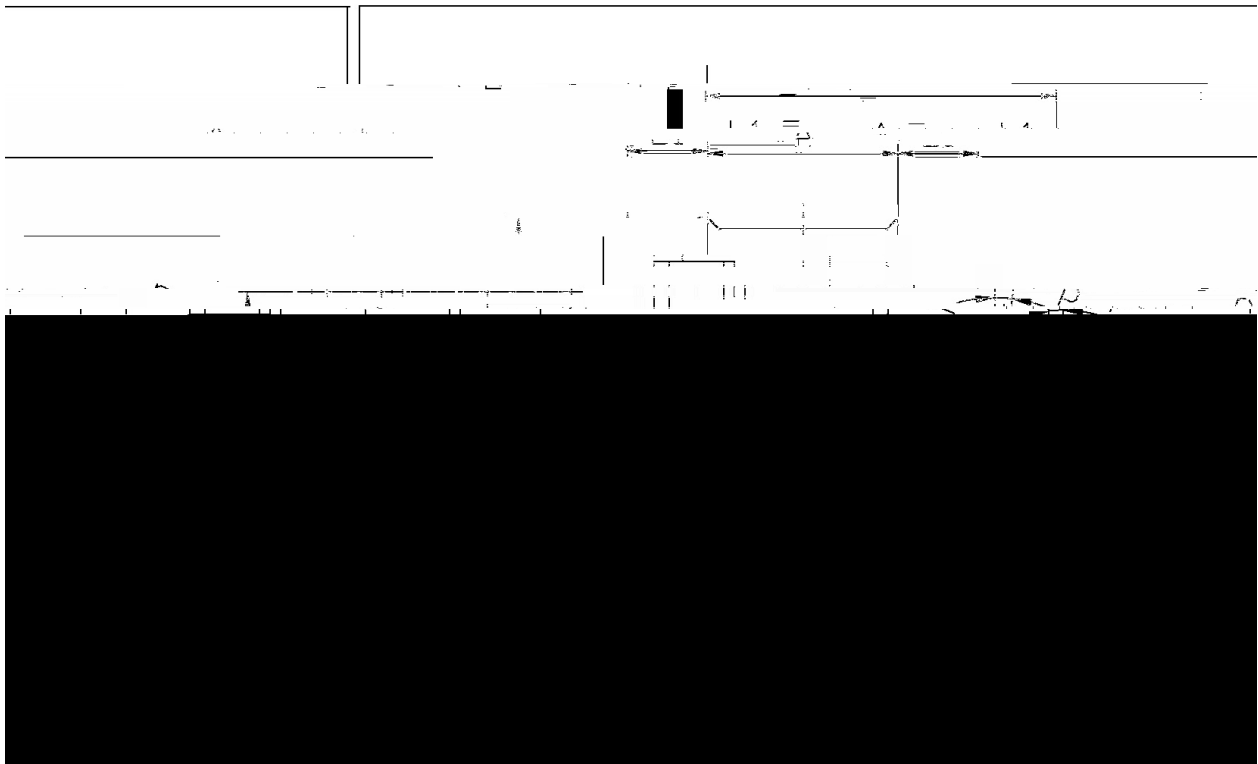
Ů

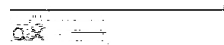
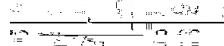
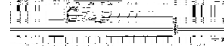
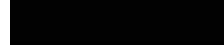
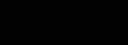
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	40	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	600	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

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	$V_{CE(sat)}$					

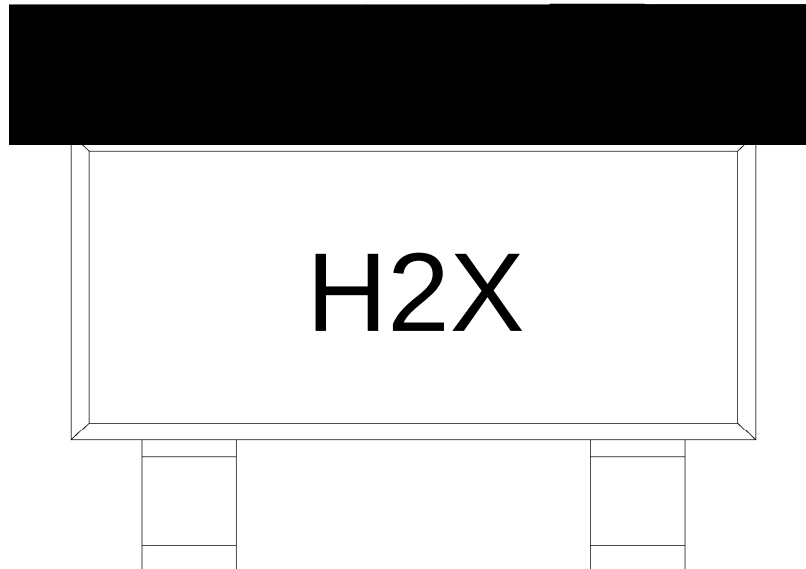
/ Package Dimensions

MMBT4401 is a 3-pin, 90° package. The package is shown in the following figure. The dimensions are given in millimeters (mm).



Dimensions In Millimeters	Symbol	Dimensions In Millimeters	Symbol	Dimension
	A		B	2.2 ± 0.2
	C		D	2.7 ± 0.2
	E		F	0.45 ± 0.05
	G		H	0.45 ± 0.05
	I		J	0.45 ± 0.05
	K		L	0.45 ± 0.05
	M		N	0.45 ± 0.05
	O		P	0.45 ± 0.05
	Q		R	0.45 ± 0.05
	S		T	0.45 ± 0.05
	U		V	0.45 ± 0.05
	W		X	0.45 ± 0.05
	Y		Z	0.45 ± 0.05

/ Marking Instructions



H

2X

Note:

H Company Code

2X Product Type Code

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

Note:

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

1.Preheating:150~180°C, Time:60~90sec.