

MMBT3904T

Rev.E Mar.-2016



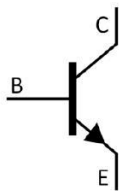
蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

SOT-89

NPN

Silicon NPN transistor in



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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 - Continuous	I_C	200	mA
Collector Power Dissipation	P_C	200	mW
Collector Power Dissipation*	$*P_C$	350	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

* 7×5×0.6mm

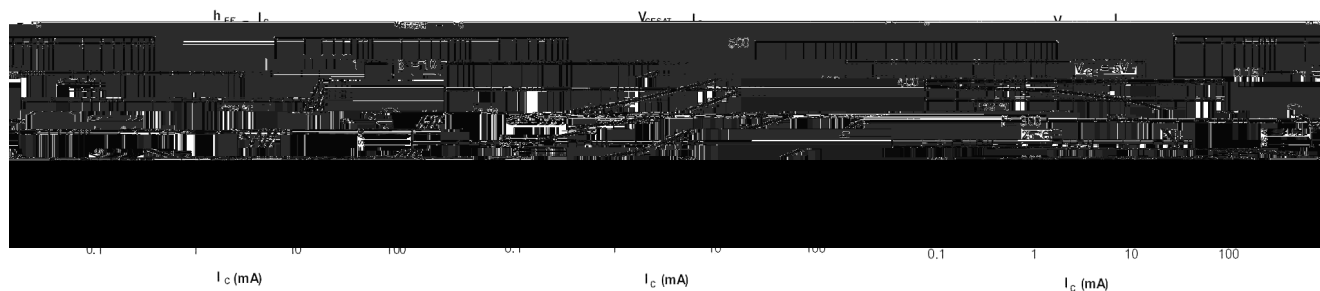
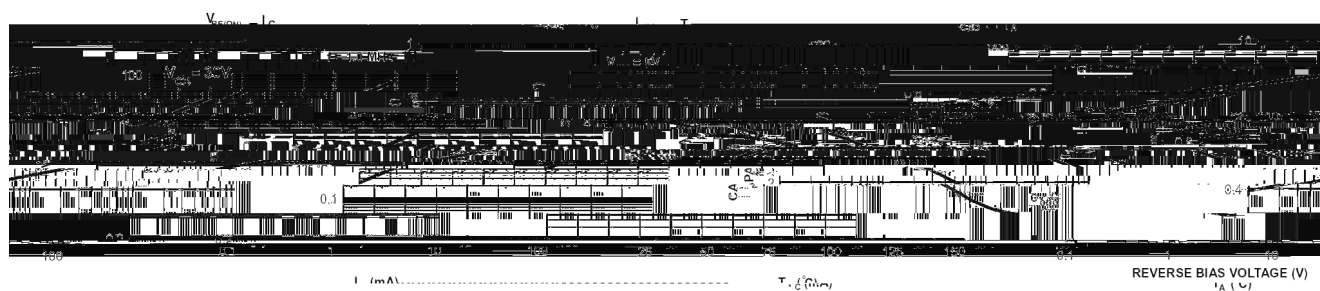
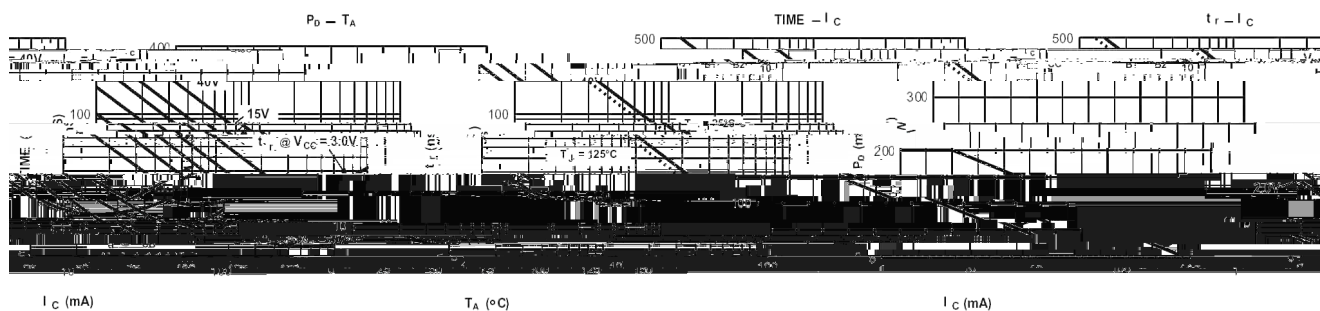
*When mounted on a 7×5×0.6mm ceramic board

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage						

电 气 特 性 / Electrical Characteristics(Ta=25 ℃)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Emitter to Base Saturation Voltage	$V_{BE(sat)}$ (2)	$I_C=50mA$ $I_B=5.0mA$			0.95	V
Transition Frequency	f_T	$I_C=10mA$ $V_{CE}=20V$ $f=100MHz$	300			MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=5.0V$ $f=1.0MHz$			4.0	pF
Storage Time	t_{stg}	$V_{CC}=3.0V$ $I_C=10mA$ $I_{B1}=-I_{B2}=1.0mA$			200	ns
Fall Time	t_f	$V_{CC}=3.0V$ $I_C=10mA$ $I_{B1}=-I_{B2}=1.0mA$			50	ns
Delay Time	t_d	$V_{CC}=3.0V$ $V_{BE}=0.5V$ $I_C=10mA$ $I_{B1}=1.0mA$			35	ns
Rise Time	t_r	$V_{CC}=3.0V$ $V_{BE}=0.5V$ $I_C=10mA$ $I_{B1}=1.0mA$			35	ns
Input Capacitance	C_{ib}	$V_{EB}=0.5V$ $f=1.0MHz$			8.0	pF

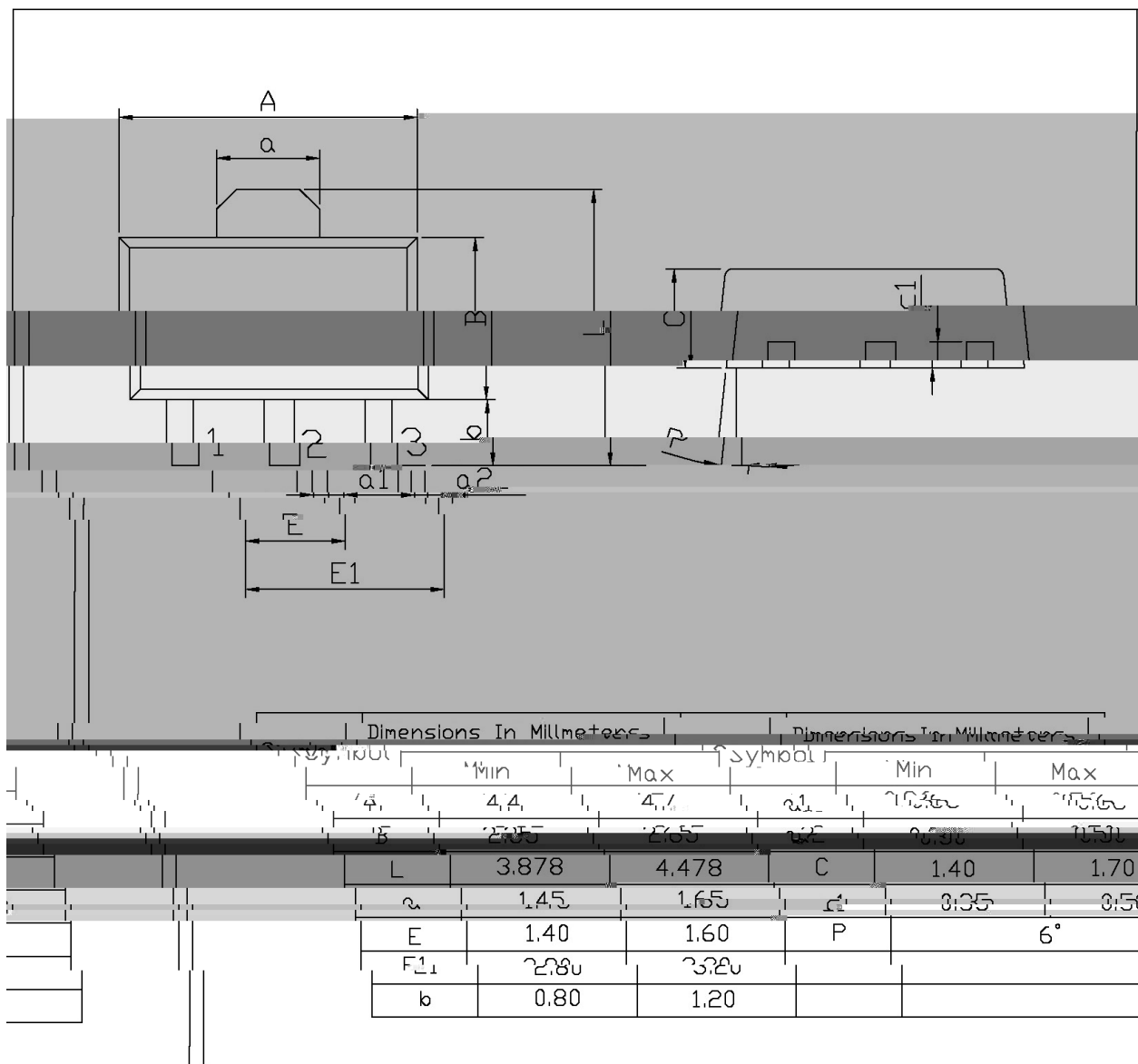
Electrical Characteristic Curve



⌘ É Ø L f / Package Dimensions

SOT-89

单位: mm



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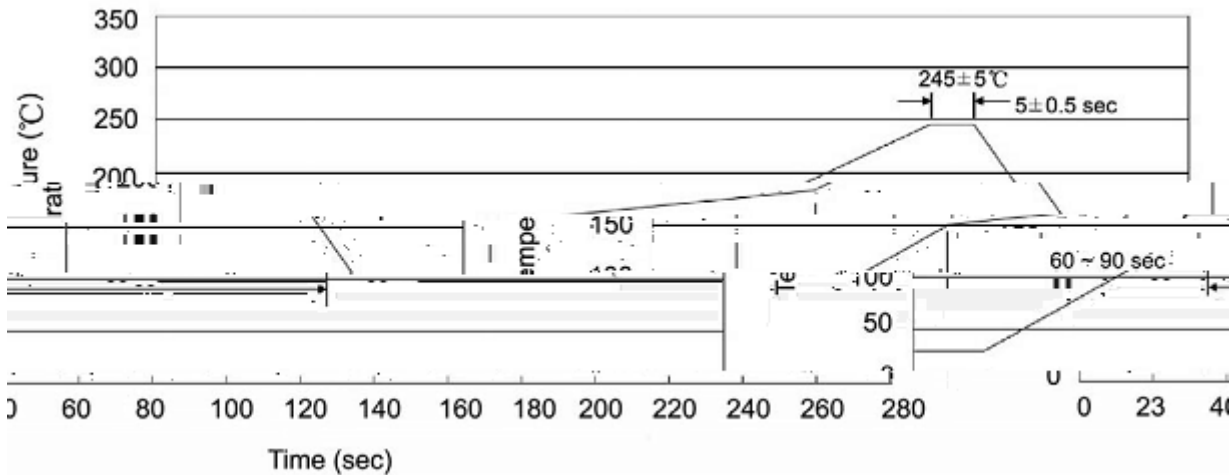
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热稳定性测试 / Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj+Se0luhh,



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Note:

1 25 150 60 90sec;

1.Preheating:25~150 , Time:60~90sec.

2 245±5 5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3 2 10 /sec.

3. Cooling Speed: 2~10 /sec.

热稳定性测试 / Resistance to Soldering Heat Test Conditions

Package Type	Units	Dimension	(unit mm)
3 260±5	3 10±1 sec.	Temp.:260±5	Time:10±1 sec

	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-89	1,000	7	7,000	8	56,000	7 ×12	180×120×180	385×257×392

注意事项 / Notices