

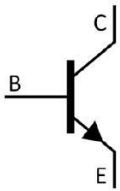
MMBT3904T

Rev.E Mar.-2016

SOT-89

NPN

Silicon NPN transistor in



MMBT3904T

Rev.E Mar.-2016

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

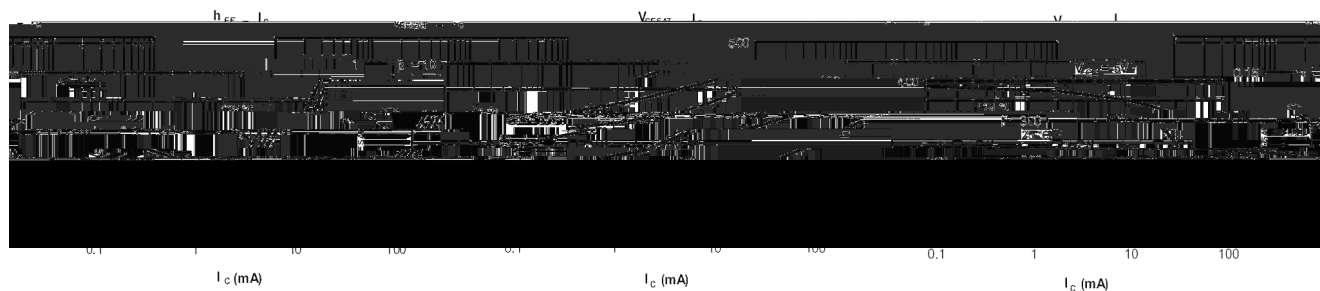
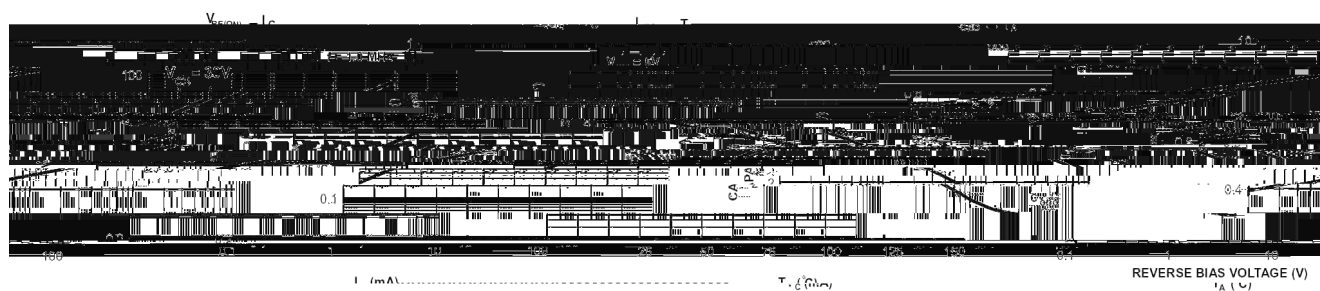
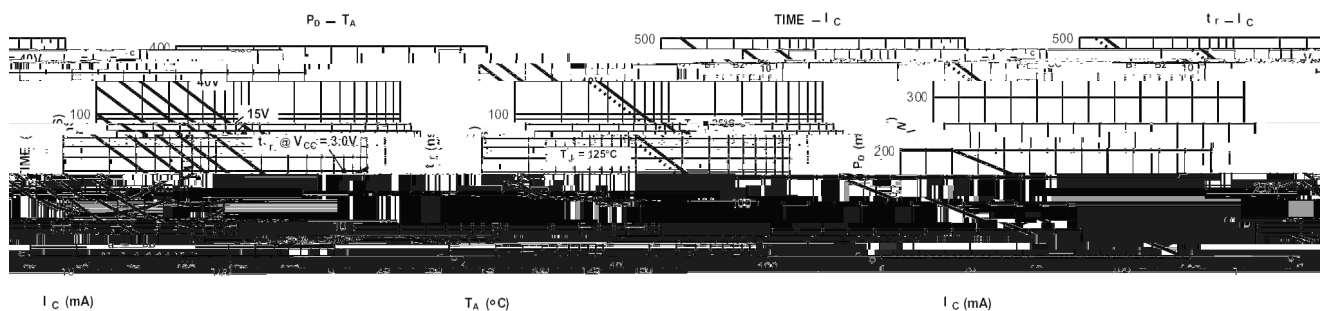
*When mounted on a 7×5×0.6mm ceramic board

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

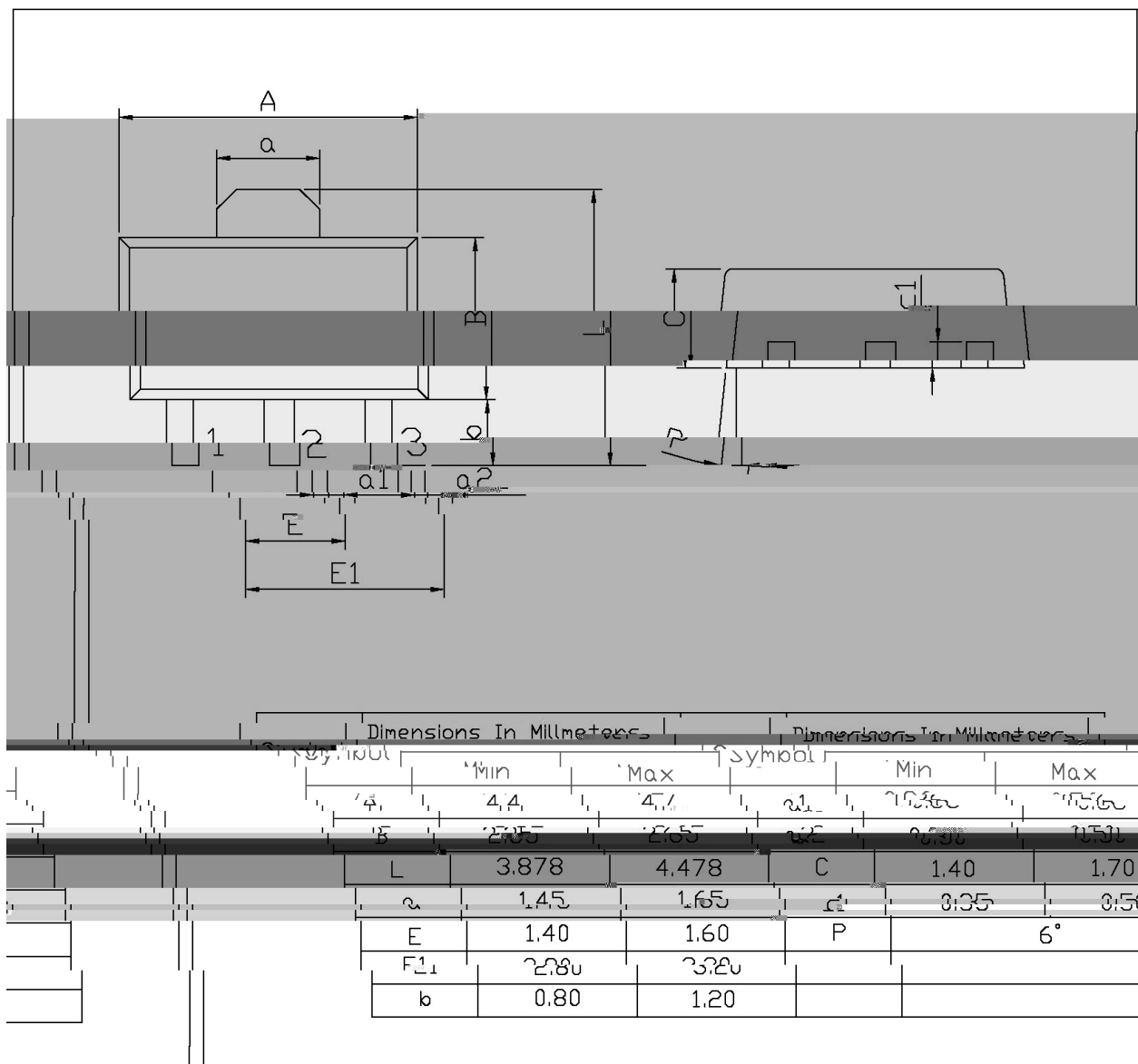
Electrical Characteristic Curve



⊂ É Ò L f / Package Dimensions

SOT-89

单位: mm



MMBT3904T

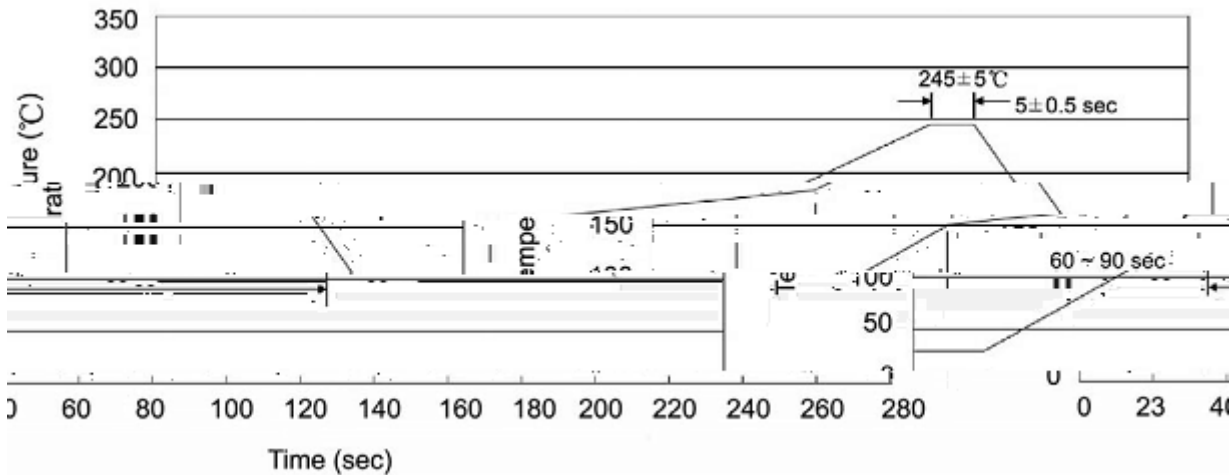
Rev.E Mar.-2016



蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

Thermal Characteristic / Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj+Se0l uhh,



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Note:

1. Preheating: 25~150 , Time: 60~90sec.
2. Peak Temp.: 245±5 , Duration: 5±0.5sec.
3. Cooling Speed: 2~10 /sec.

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

Notices