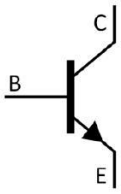
SOT-89 NPN Silicon NPN transistor in



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

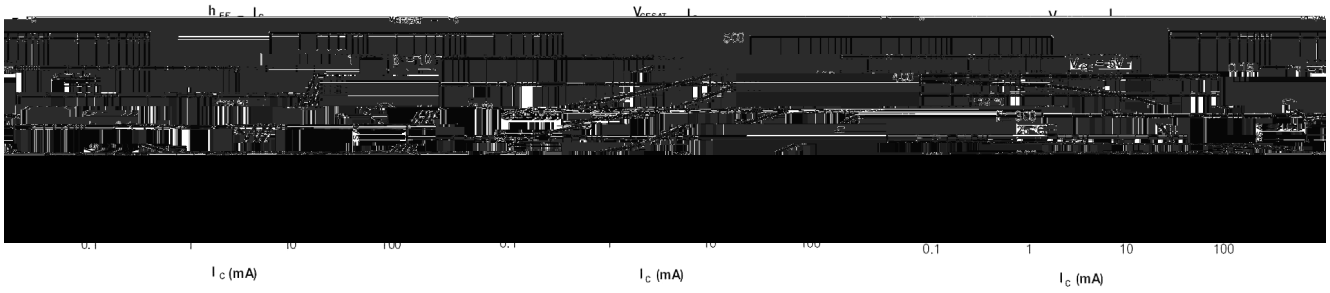
*When mounted on a 7×5×0.6mm ceramic board

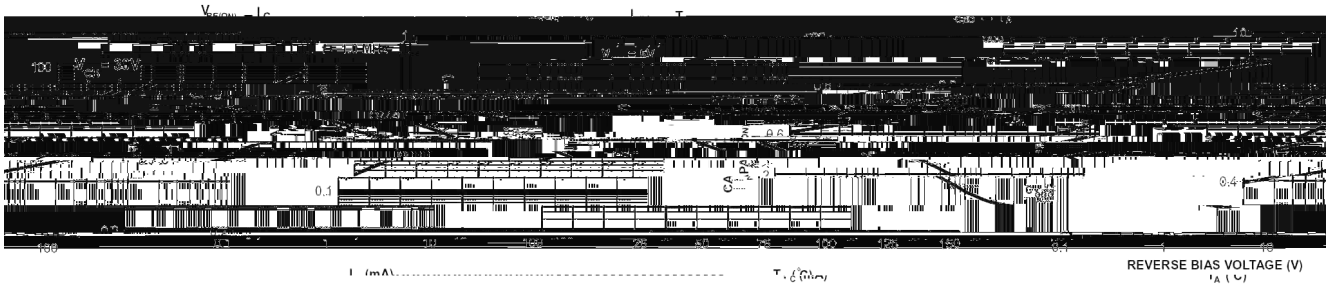
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage						

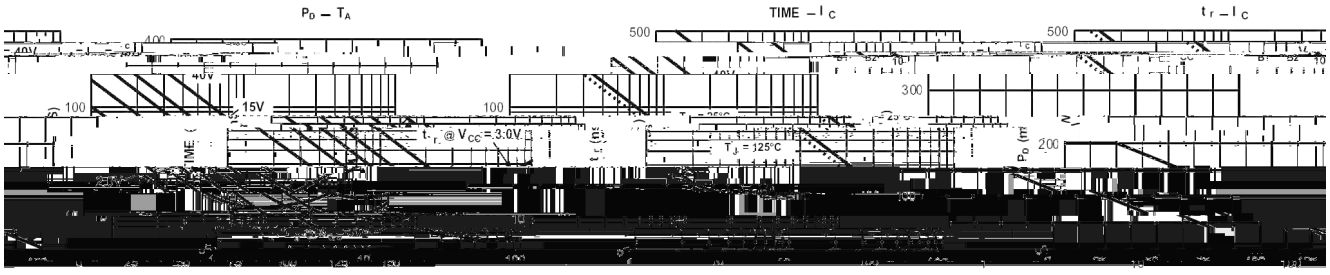
/ Electrical Characteristics(Ta=25)

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



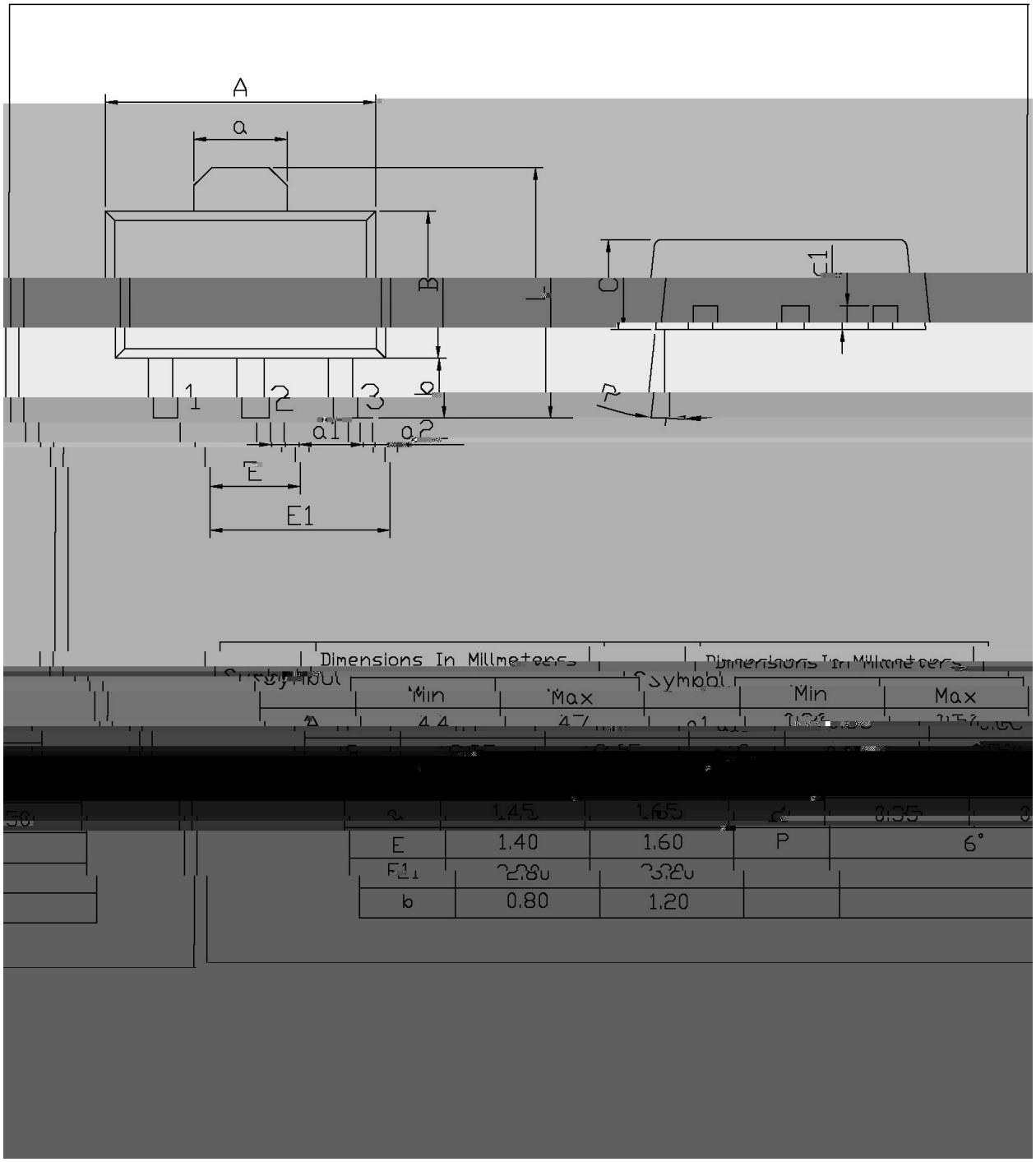




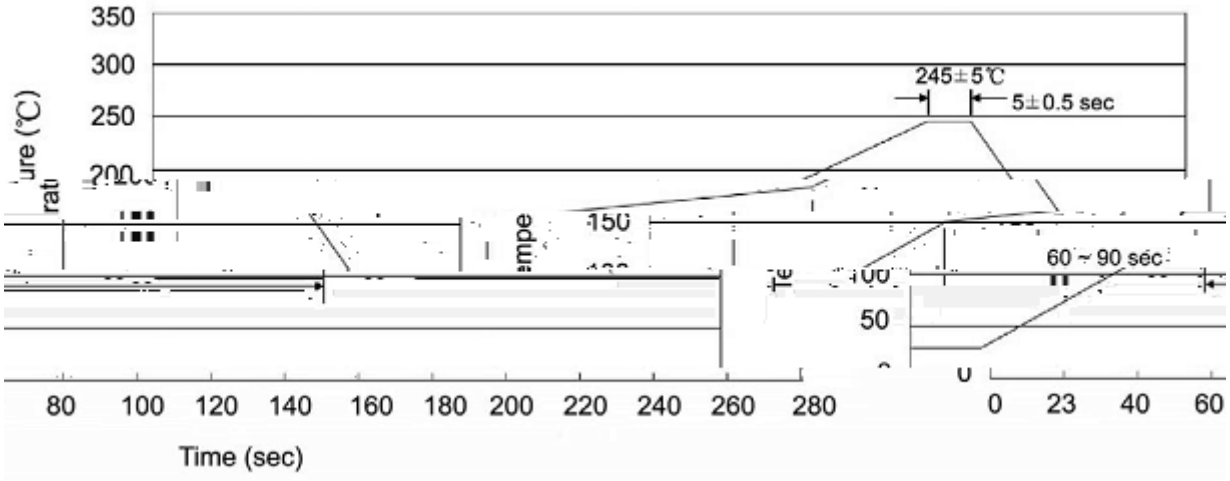
/ Package Dimensions

SOT-89

单位：mm



( ) /



٩		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.

/ Resistance to Soldering Heat Test Conditions

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

								3)
	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