/ Descriptions

TO-92LM NPN Silicon NPN transistor in a TO-92LM Plastic Package.

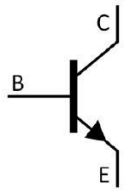
/ Features

High collector-Base voltage.

/ Applications

Color TV chroma output.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

h / h_{FE} Classifications & Marking

h_{FE} ClassiH

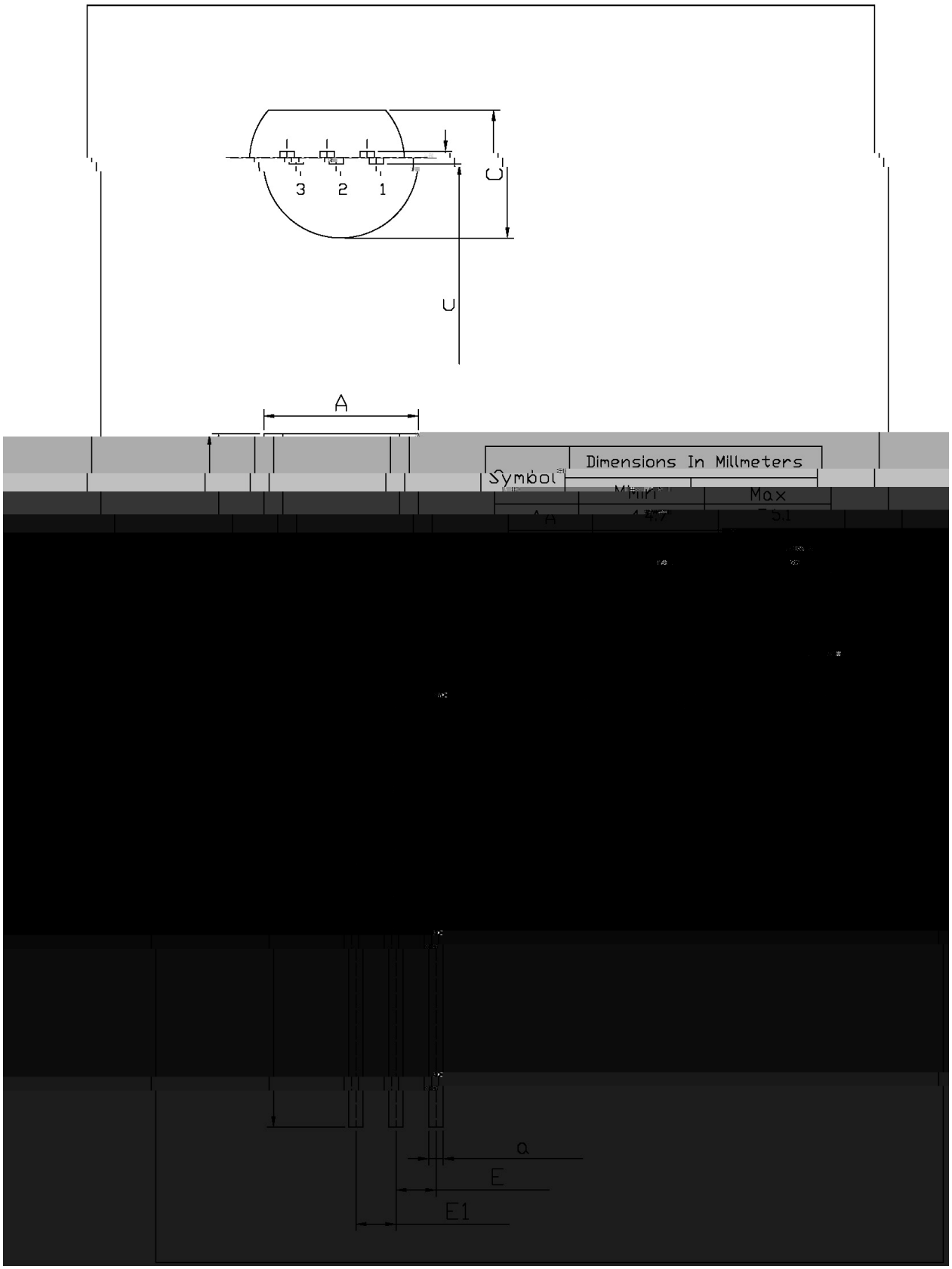
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	300	V
Collector to Emitter Voltage	V_{CEO}	300	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current (DC)	I_C	100	mA
Collector Power Dissipation	P_C	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

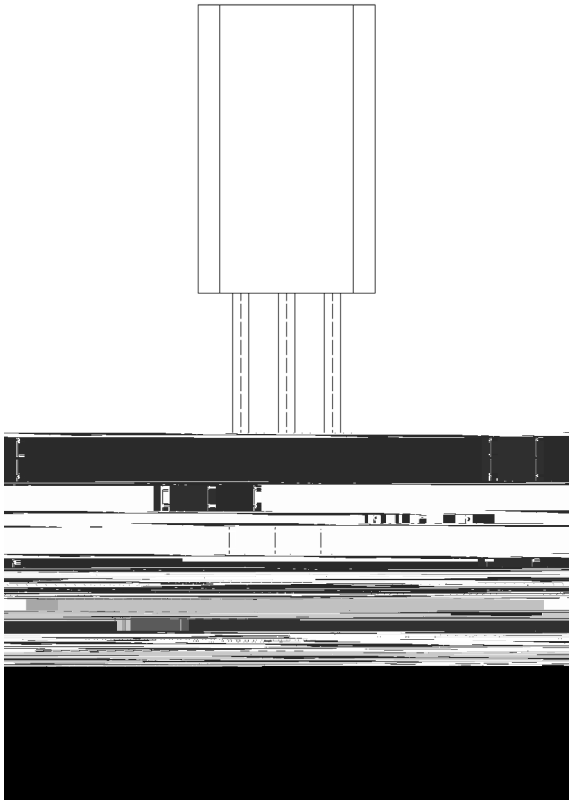
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=100 A I_E=0	300			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=5.0mA I_B=0	300			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-100 A I_C=0	7.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=200V I_E=0			0.1	A
\DC Current Gain	h_{FE}	V_{CE}=10V I_C=20mA	40		240	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=10mA I				

/ Electrical Characteristic Curve

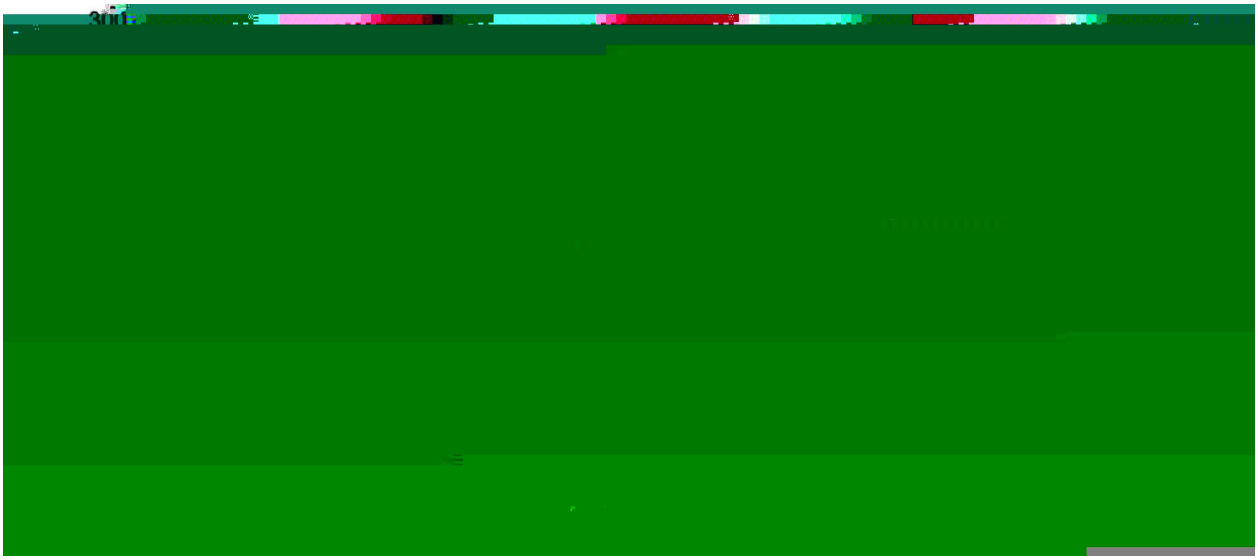
/ Package Dimensions

TO-92LM Unit: mm





( ) / Temperature Profile for Dip Soldering(Pb-Free)



			Note:
1	25 150	60 90sec;	1.Preheating:25~150 , Time:60~90sec.
2	255±5	5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3	2 10 /sec.		3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270±5	10±1 sec.	Temp.:270±5	Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension		(unit mm3)
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-92LM	1,000	8	8,000	5	40,000	135×190	237×172×102	560×245×195

/ AMMO

Package Type	Units					Dimension	(unit mm3)
	Units/tape /	Tape/Inner Box /	Rows/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Inner Box	Outer Box
TO-92LM	2,500	1	100	10	25,000	328×230×42	480×346×235 547×407×268

/ Notices