

/ Descriptions

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

/ Features

High V_{CEO} .

/ Applications

Color TV horizontal deflection driver, chroma output applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	C	D	E
h_{FE} Range	40 80	60 120	100 200

/ Absolute Maximum Ratings(Ta=25)

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}	6.0	V
Collector Current (DC)	I_C	100	mA
Collector Current (Pulse)	I_{CP}	300	mA
Collector Power Dissipation	P_C	900	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

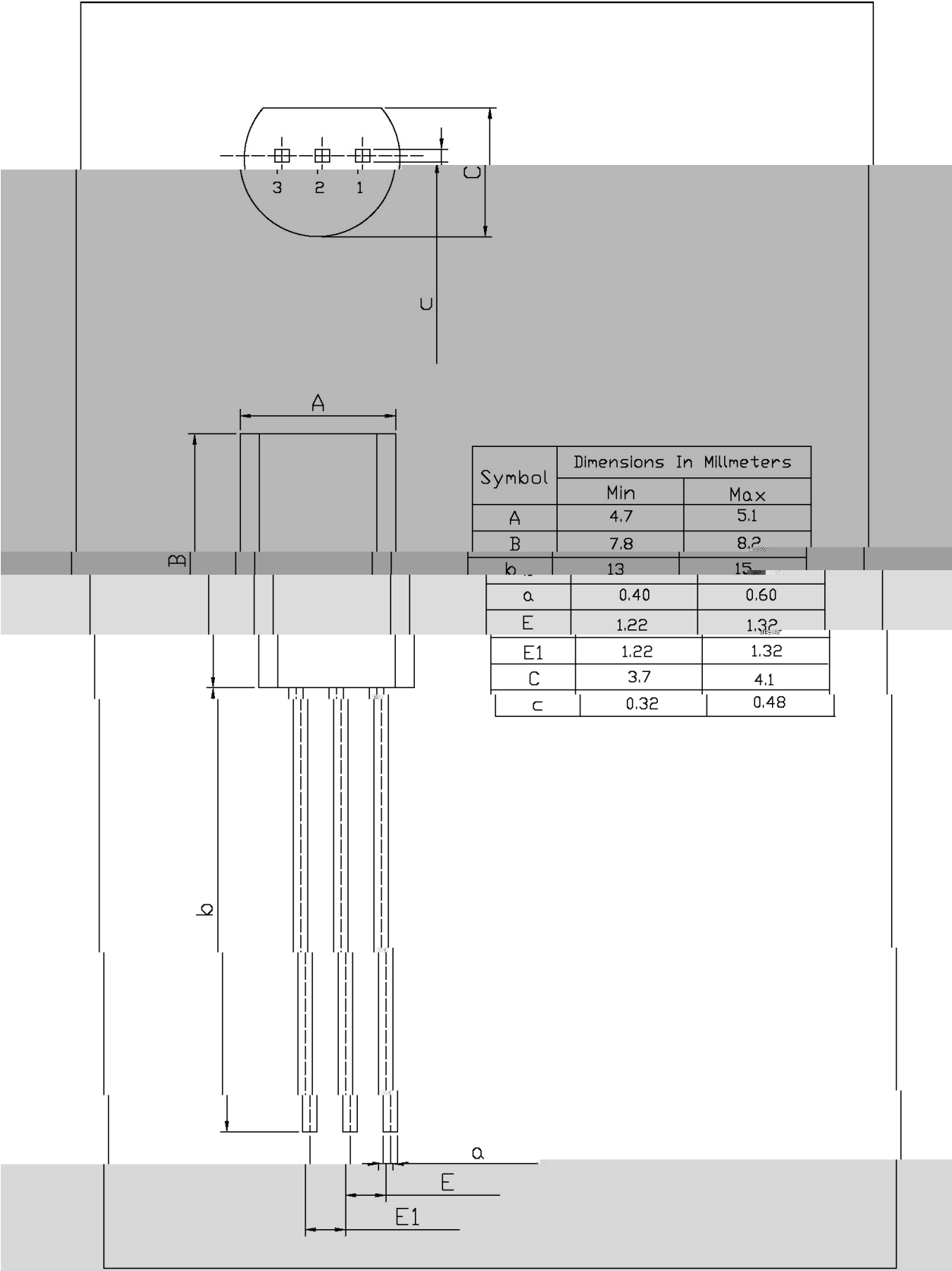
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=200V$ $I_E=0$			1.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=6.0V$ $I_C=0$			1.0	μA
DC Current Gain	h_{FE}	$V_{CE}=10V$ $I_C=10mA$	40		200	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=20mA$ $I_B=2.0mA$			0.6	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=20mA$ $I_B=2.0mA$			1.0	V
Transition Frequency	f_T	$V_{CE}=30V$ $I_C=10mA$	50			MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$			7.5	pF

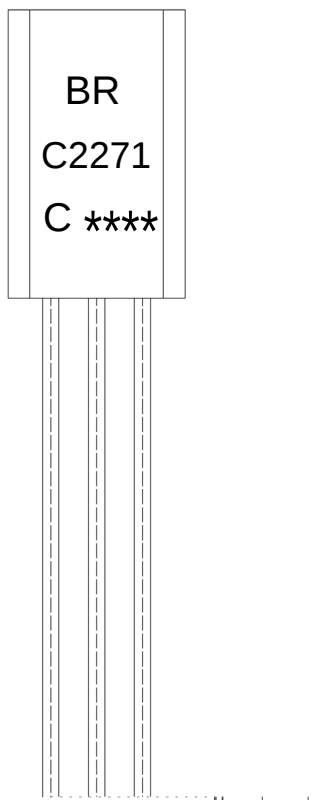
I Package Dimensions

T0-92LM

Unit: mm



/ Marking Instructions



BR:

C2271

C: h_{FE}

Note:

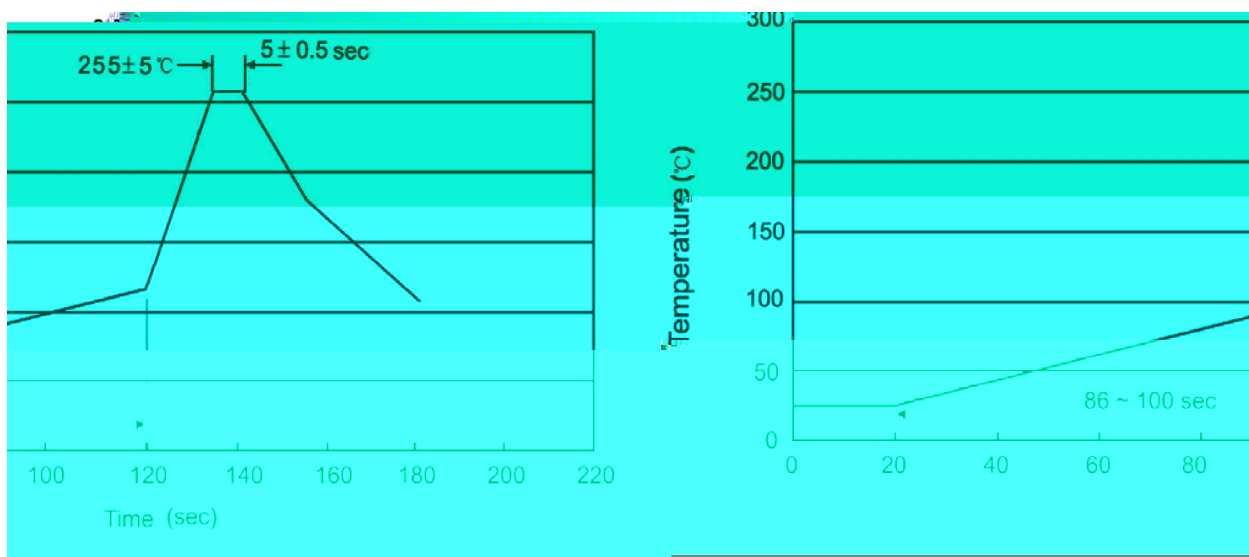
BR: Company Code.

C2271: Product Type.

C: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

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



Note:

1. Preheating: 25~150 , Time: 60~90sec.
2. Peak Temp.: 255±5 , Duration: 5±0.5sec.
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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-92LM	1,000	8	8,000	5	40,000	135×190	237×172×102	560×245×195

/ AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	Units/tape 只/纸带	Tape/Inner Box 纸带/盒	Rows/Inner Box 纸带层/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Inner Box 盒	Outer Box 箱
TO-92LM	2,500	1	100	10	25,000	328×230×42	小箱 480×346×235 大箱 547×407×268

/ Notices