/ Descriptions

Silicon PNP transistor in a TO-92 Plastic Package.

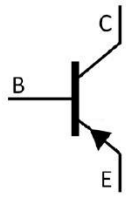
/ Features

High total power dissipation, high h_{FE} and high V_{CEO}.

/ Applications

Audio frequency amplifier and driver stage.

/ Equivalent Circuit



/ Pinning

PIN1 Base PIN 2 Collector PIN 3 Emitter

/ hFE Classifications & Marking

h_{FE} Classifications Symbol	M	L	K
h_{FE} Range	90~180	135~270	200~400

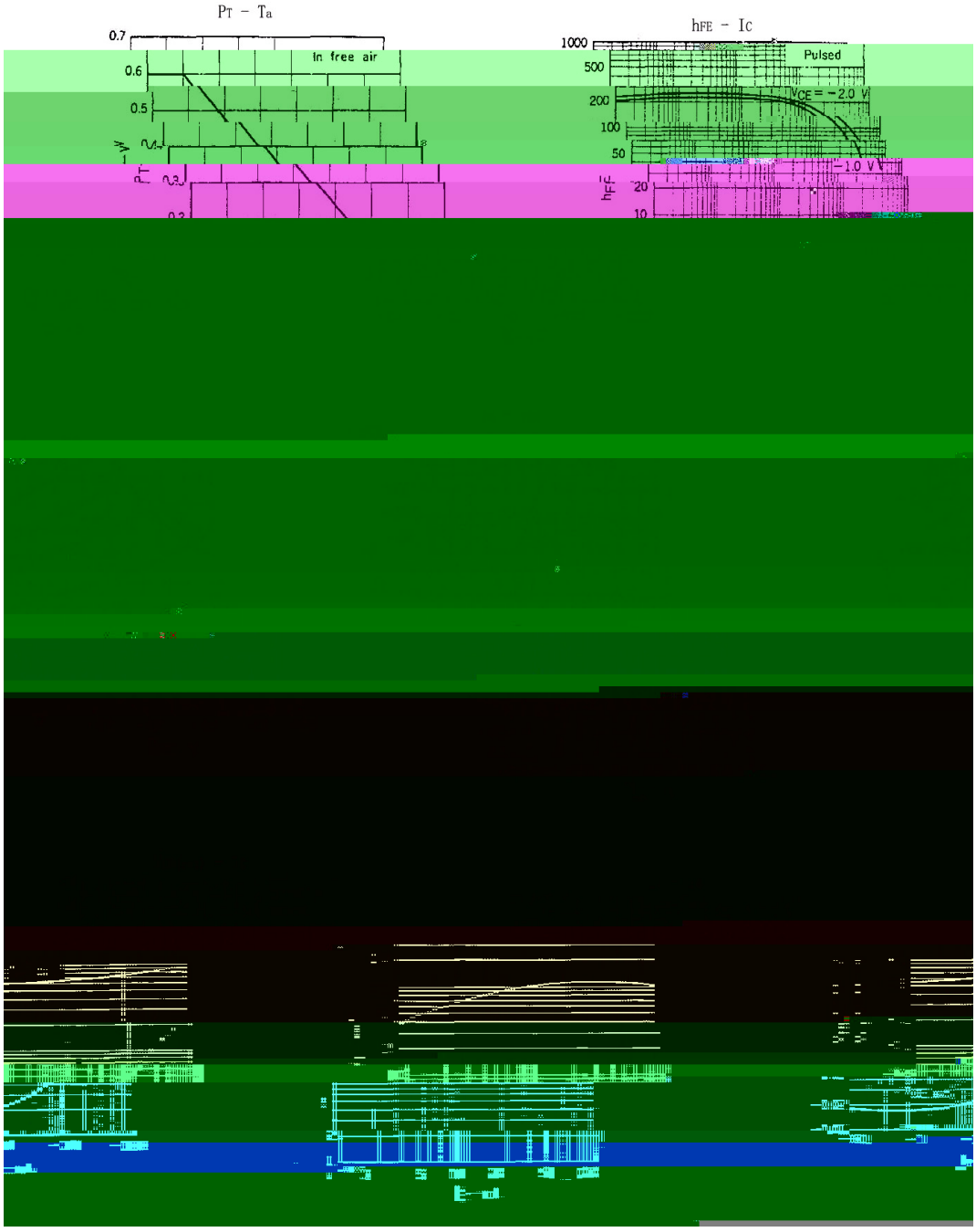
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-300	mA
Base Current – Continuous	I_B	-60	mA
Collector Power Dissipation	P_C	600	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

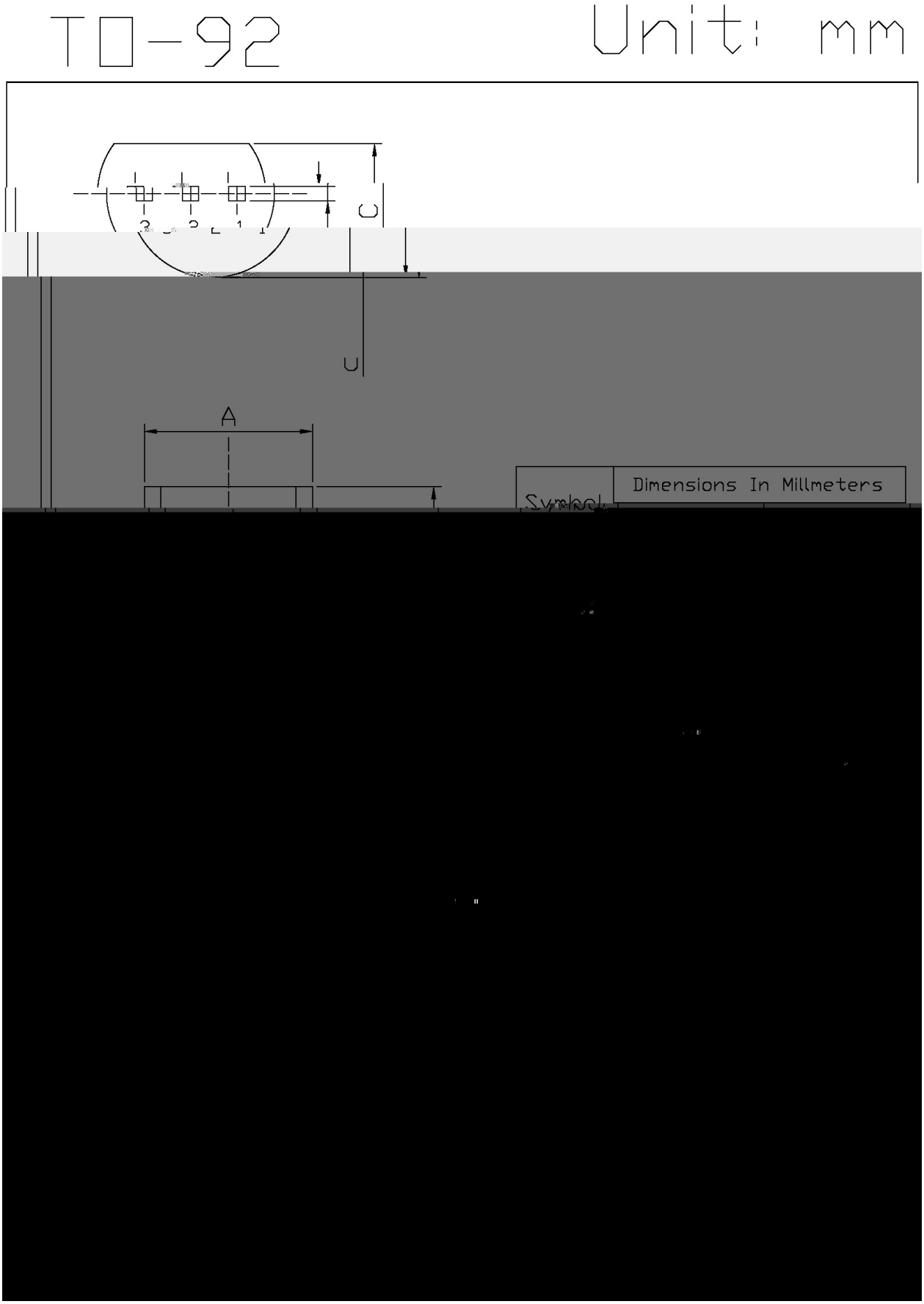
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=-60V I_E=0			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-5.0V I_C=0			-0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=-1.0V I_C=-50mA	90		400	
	$h_{FE(2)}$	V_{CE}=-1.0V I_C=-300mA	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-300mA I_B=-30mA		-0.15	-0.60	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-300mA I_B=-30mA		-0.85	-1.20	V
Base to Emitter Voltage	V_{BE}	V_{CE}=-6.0V I_C=-10mA		-0.66	-0.70	V
Transition Frequency	f_T	V_{CE}=-6.0V I_C=-10mA	50	100		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-6.0V I_E=0 f=1.0MHz		13	25	pF

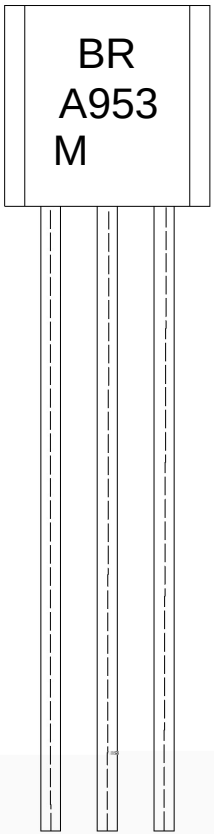
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions

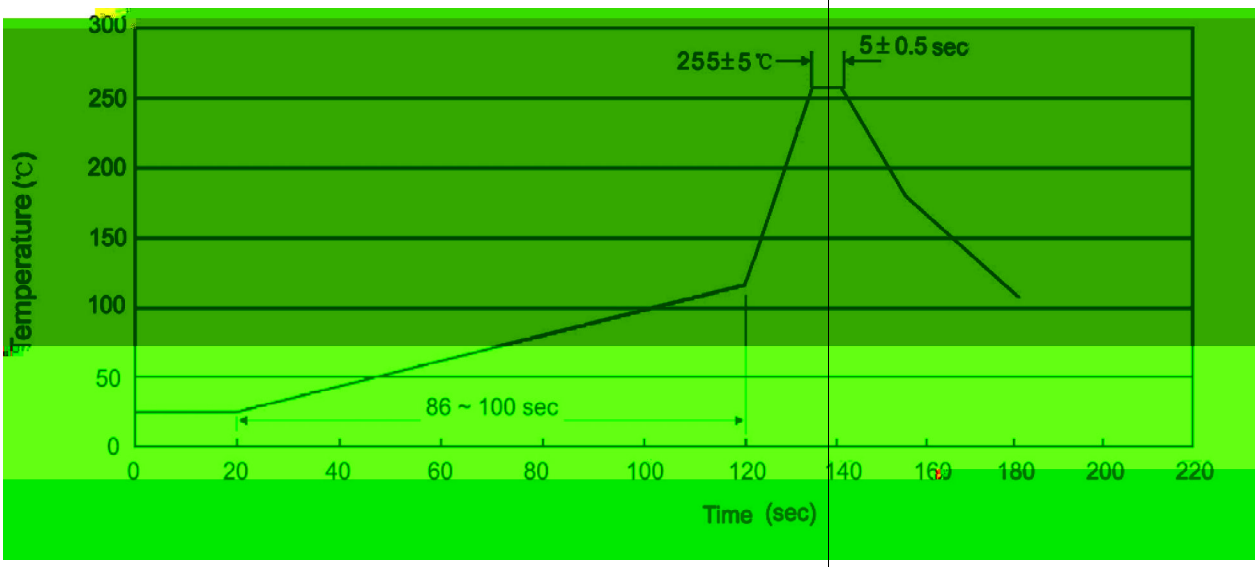


h_{FE}

Note:

BR:	Company Code.
A953:	Product Type.
M:	h_{FE} Classifications Symbol
****:	Lot No. Code,code change with Lot No.

( ) / 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱

/ AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	只纸带	纸带盒	纸带层盒	盒箱	只箱	盒	箱