

/ Descriptions

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

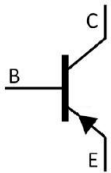
/ Features

Low $V_{CE(sat)}$.

/ Applications

Low frequency amplifier, electronic governor applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

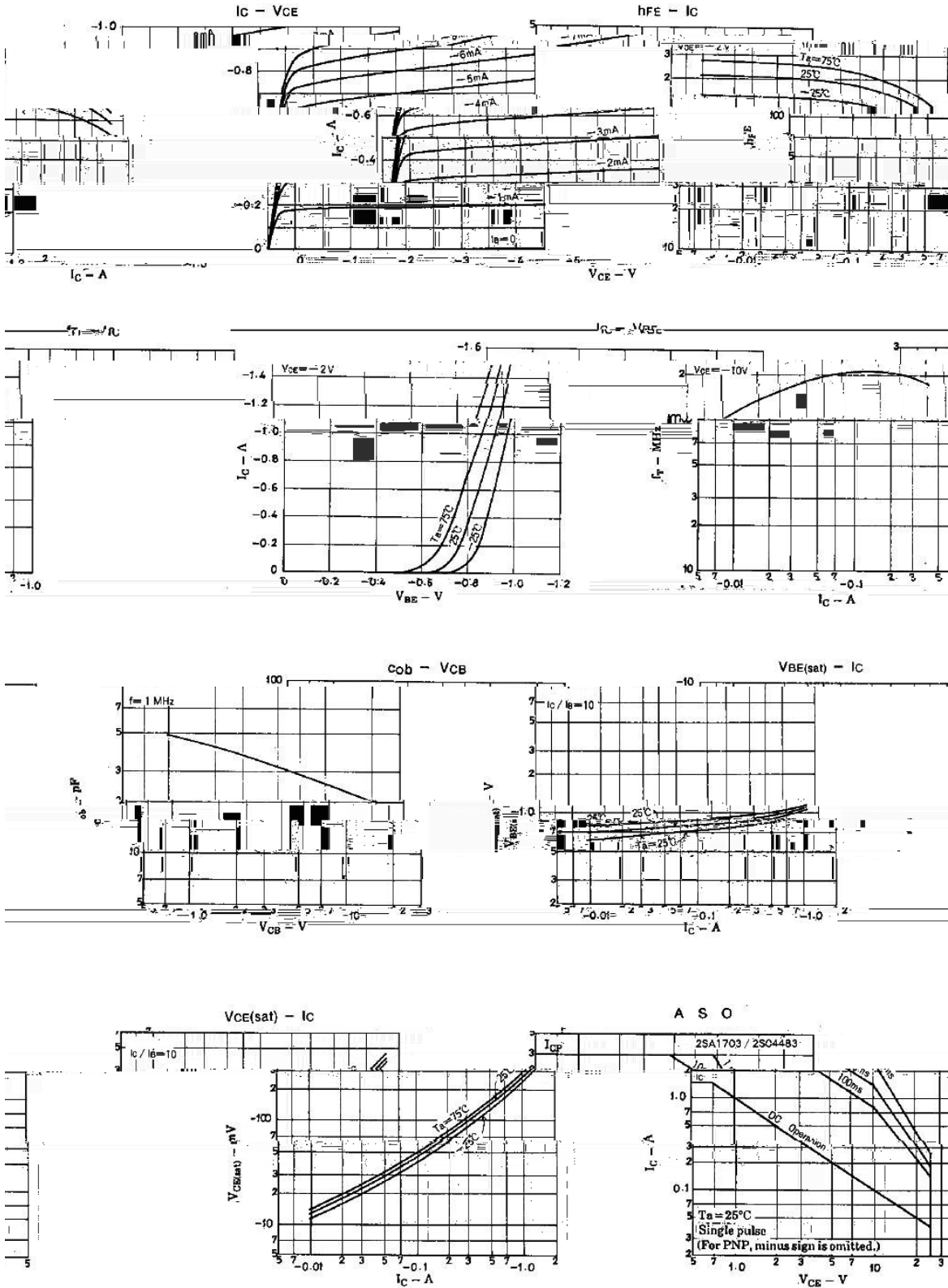
/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	R	S	T
h_{FE} Range	100~200	140~280	200~400

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-25	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-1.5	A
Collector Current – Continuous(Pulse)	I_{CP}	-3.0	A
Collector Power Dissipation	P_C	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

					Typ	Max	Unit
Voltage	V_{CBO}	$I_C = 10\mu A$	$I_E = 0$	-30			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C = -1.0mA$	$I_B = 0$	-25			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E = -10\mu A$	I_C				

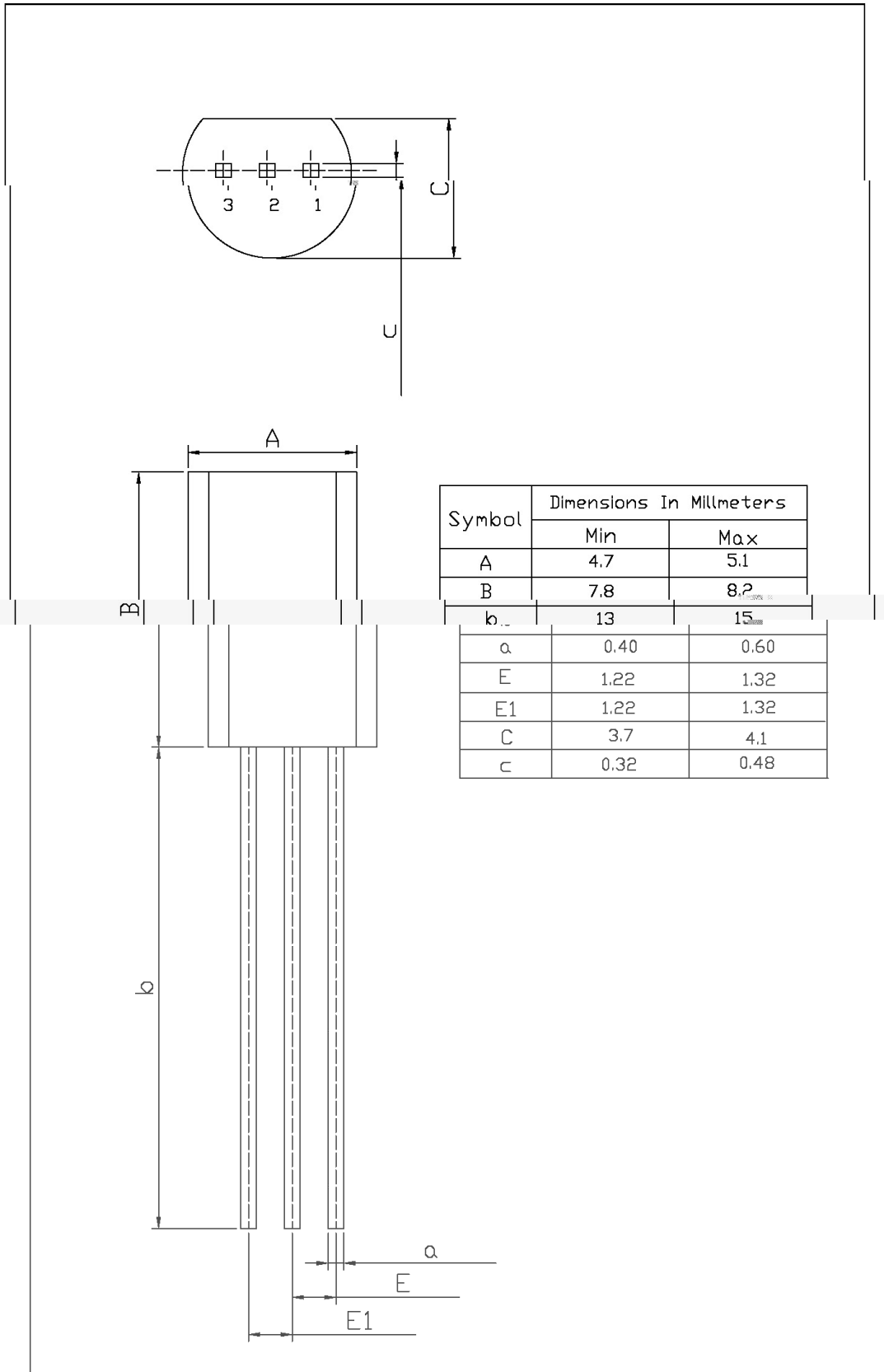
/ Electrical Characteristic Curve



/ Package Dimensions

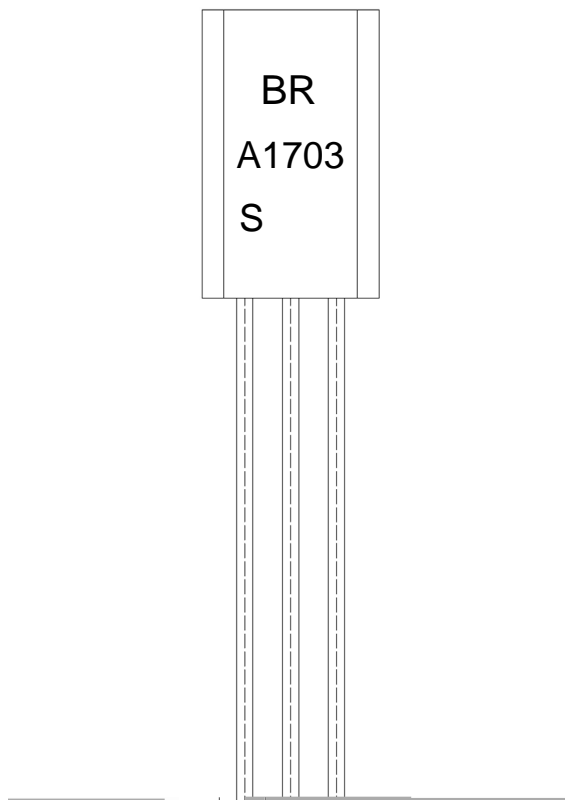
TO-92LM

Unit: mm



Symbol	Dimensions In Millimeters	
	Min	Max
A	4.7	5.1
B	7.8	8.2
b ₁	13	15
a	0.40	0.60
E	1.22	1.32
E1	1.22	1.32
C	3.7	4.1
c	0.32	0.48

/ Marking Instructions



Note:

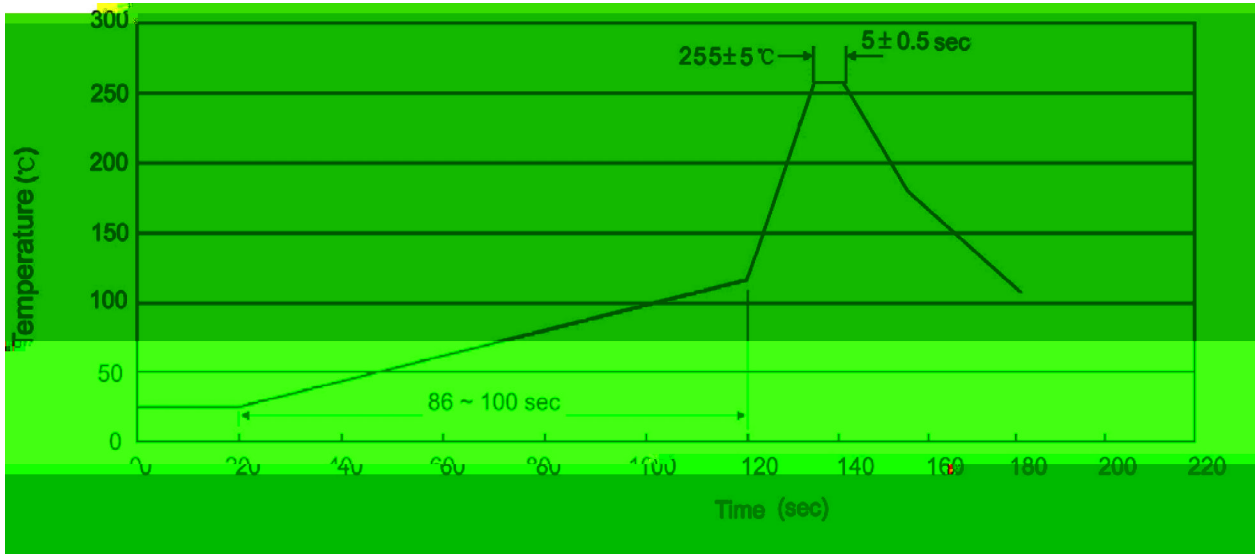
BR: Company Code.

A1703: Product Type.

S: 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

/ Package SPEC.

/ BULK

Package Type	Units				Dimension (unit mm3)		