

ED1702

Rev.D Nov.-2015

/ Descriptions

TO-92(R) NPN Silicon NPN transistor in a TO-92(R) Plastic Package.

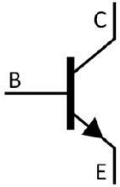
/ Features

0.1W , ED1802
High h_{FE} , 1 watts amplifier applications, complementary pair with ED1802.

/ Applications

Audio frequency amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Base PIN 3 Collector

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	K	L	M	N
h_{FE} Range	106~150	132~188	170~230	213~300

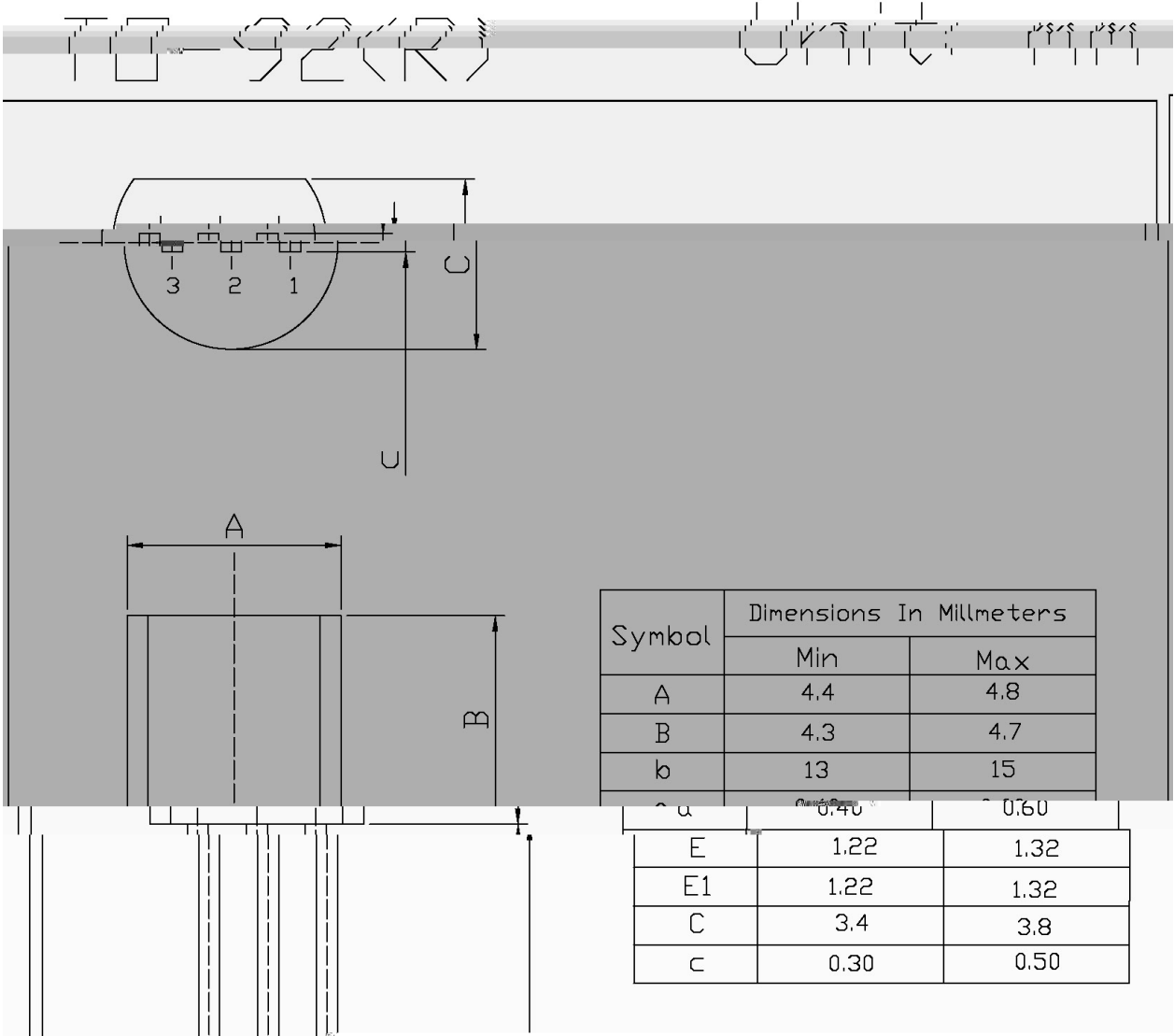
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	35	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	800	mA
Emitter Current - Continuous	I_E	-800	mA
Collector Power Dissipation	P_c	600	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

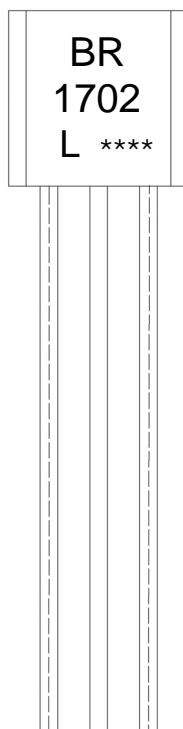
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	$I_{CBO(1)}$	$V_{CB}=30V$ $I_E=0$			0.1	A
	$I_{CBO(2)}$	$V_{CB}=30V$ $T_a=125^\circ C$ $I_E=0$			5.0	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.1	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0V$ $I_C=100mA$	106		300	
	$h_{FE(2)}$	$V_{CE}=1.0V$ $I_C=500mA$	40			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=20mA$		0.15	0.5	V
Base -Emitter Voltage	V_{BE}	$V_{CE}=1.0V$ $I_C=500mA$			1.2	V
Transition Frequency	f_T	$V_{CE}=5.0V$ $I_C=10mA$		120		MHz
Current Gain Bandwidth Product	C_{ob}	$V_{CB}=10V$ $f=1.0MHz$ $I_E=0$		13		pF

/ Package Dimensions



/ Marking Instructions



BR

1702

L

h_{FE}

Note:

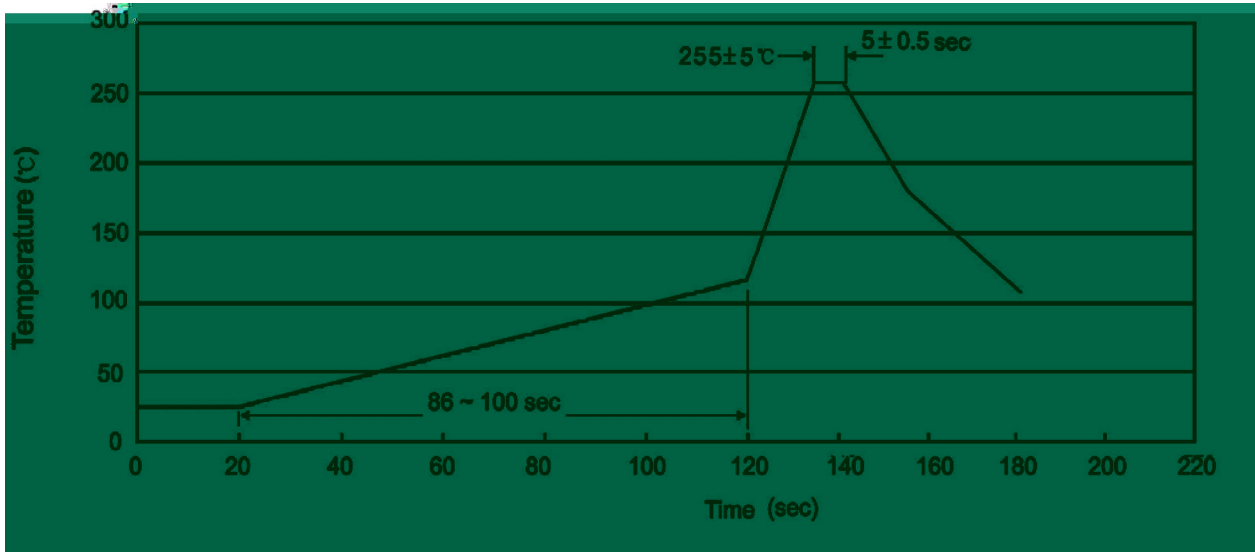
BR: Company Code.

1702: Product Type.

L 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±0.5 | sec; | 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