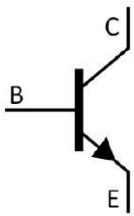


Rev.E Mar.-2016

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

High f_T .

General amplifier.

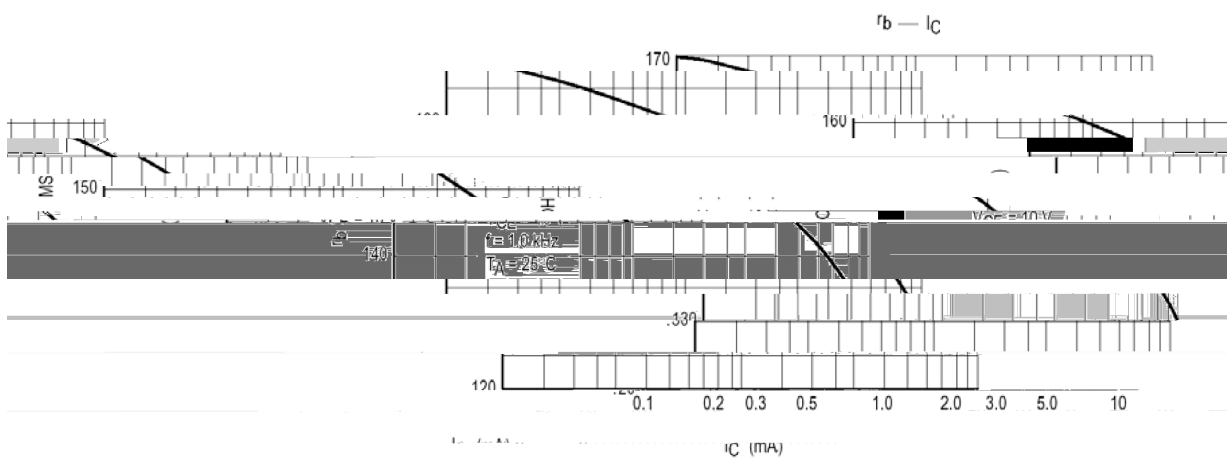
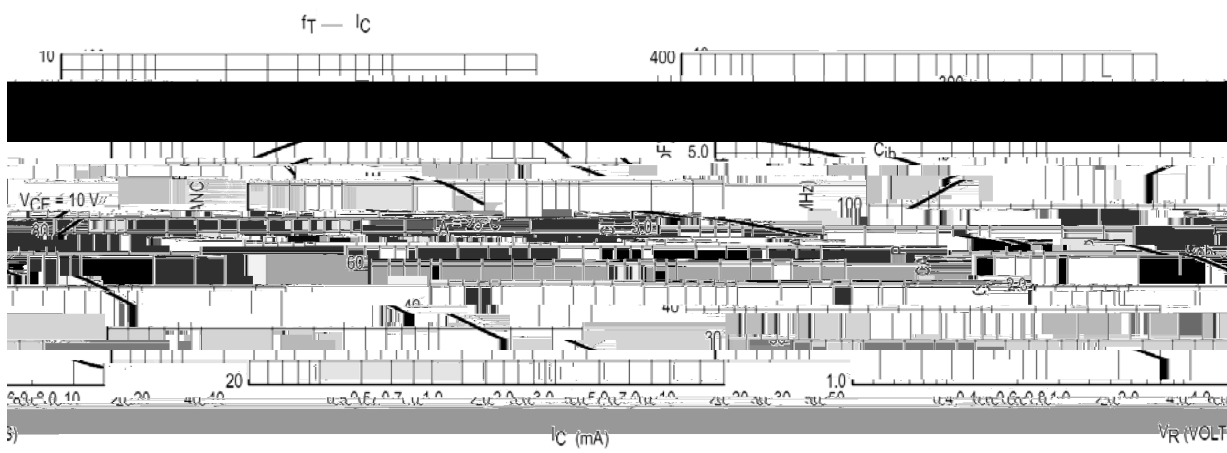
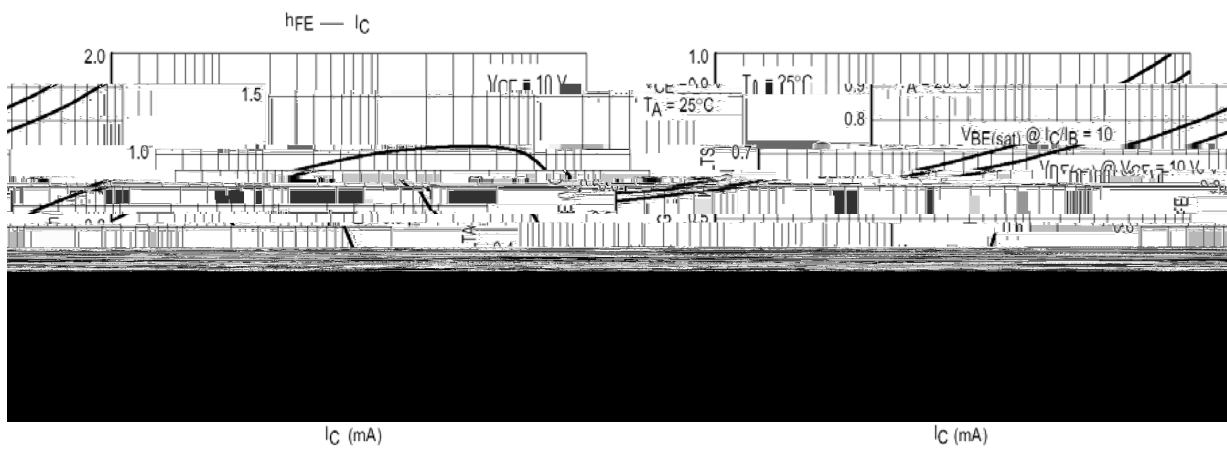


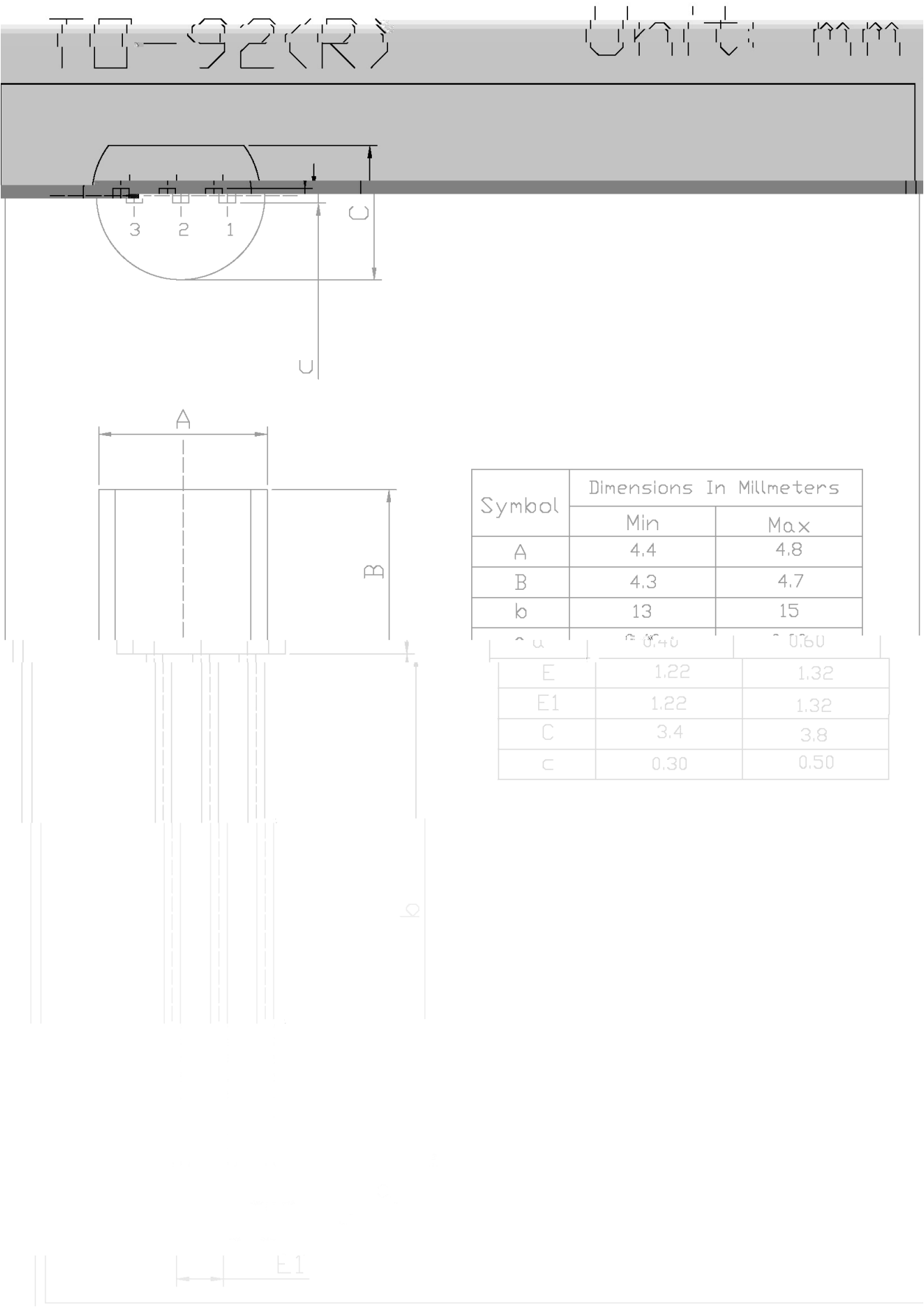
PIN1 Emitter PIN 2 Base PIN 3 Collector

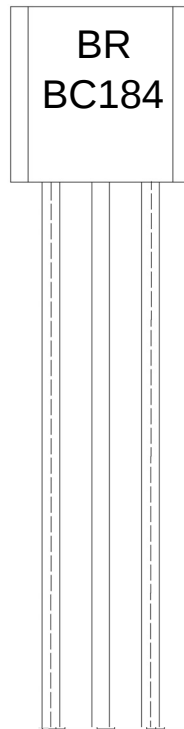
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	45	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	350	mW
Collector Power Dissipation	$P_C(T_c=25^\circ\text{C})$	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}	$I_C=10\text{ A}$ $I_E=0$	45			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=2.0\text{mA}$ $I_B=0$	30			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=100\text{ A}$ $I_C=0$	6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=30\text{V}$ $I_E=0$		0.0002	0.015	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4.0\text{V}$ $I_C=0$			0.015	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0\text{V}$ $I_C=2.0\text{mA}$	250		800	
	$h_{FE(2)}$	$V_{CE}=5.0\text{V}$ $I_C=10\text{ A}$	100			
	$h_{FE(3)}$	$V_{CE}=5.0\text{V}$ $I_C=100\text{mA}$	130			
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=10\text{mA}$ $I_B=0.5\text{mA}$		0.07	0.25	V
	$V_{CE(sat)(2)}$	$I_C=100\text{mA}$ $I_B=5.0\text{mA}$		0.2	0.6	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100\text{mA}$ $I_B=5.0\text{mA}$			1.2	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=5.0\text{V}$ $I_C=2.0\text{mA}$	0.55	0.62	0.7	V
Transition Frequency	f_T	$I_C=10\text{mA}$ $V_{CE}=5.0\text{V}$ $f=100\text{ MHz}$	150	280		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}$ $I_C=0$ $f=1.0\text{MHz}$			5.0	pF
Common Base Input Capacitance	C_{ib}	$V_{EB}=0.5\text{V}$ $I_C=0$ $f=1.0\text{MHz}$		8.0		pF
Small-Signal Current Gain	h_{fe}	$I_C=2.0\text{mA}$ $V_{CE}=5.0\text{V}$ $f=1.0\text{MHz}$	240		900	
Noise Figure	NF	$I_C=0.2\text{mA}$ $V_{CE}=5.0\text{V}$ $R_S=2.0\text{ K}$ $f=1.0\text{MHz}$		2.0	4.0	dB







BR

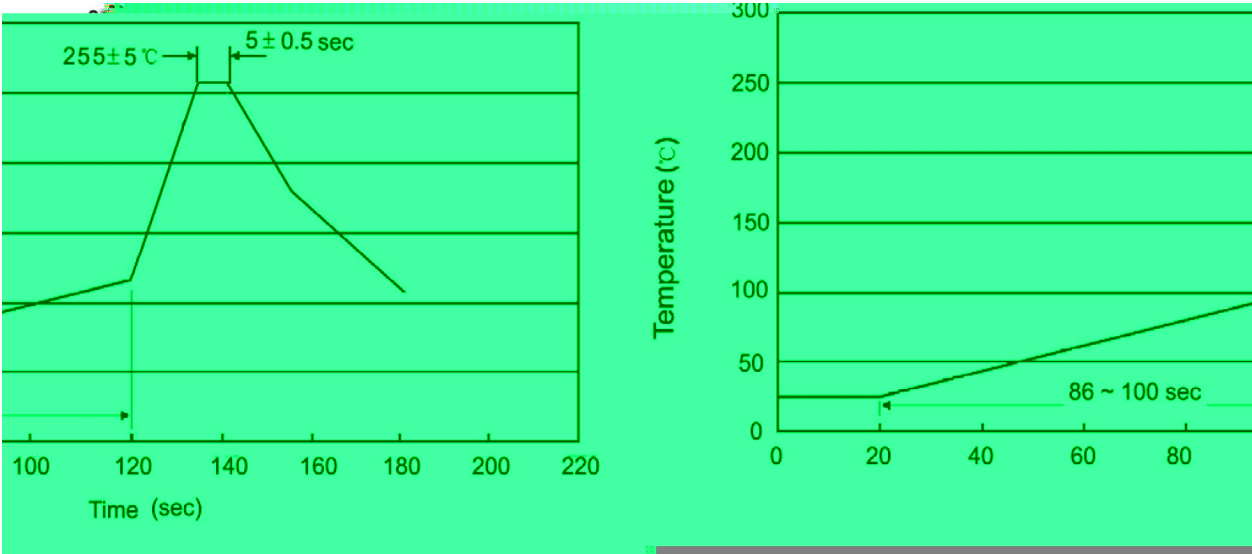
BC184

Note:

BR: Company Code.

BC184: Product Type.

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



- | | | | | |
|---|-------|-----|-----------|--------|
| 1 | 25 | 150 | 60 | 90sec; |
| 2 | 255±5 | | 5±0.5sec; | |
| 3 | | 2 | 10 | /sec. |

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

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

0.777 0.Q Tf1135 TD-6.483 3 36.48322c983196.040014 Tc()TjET161c04db040a Tf1125 TD-3