/ Descriptions

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

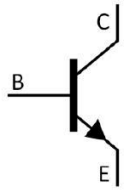
/ Features

High Voltage, Low Noise.

/ Applications

General purpose and switching application.

/ Equivalent Circuit



/ Pinning

PIN1 Emitter PIN 2 Base PIN 3 Collector

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	A	B	C
h_{FE} Range	110 220	200 450	420 800

/ Absolute Maximum Ratings(Ta=25)

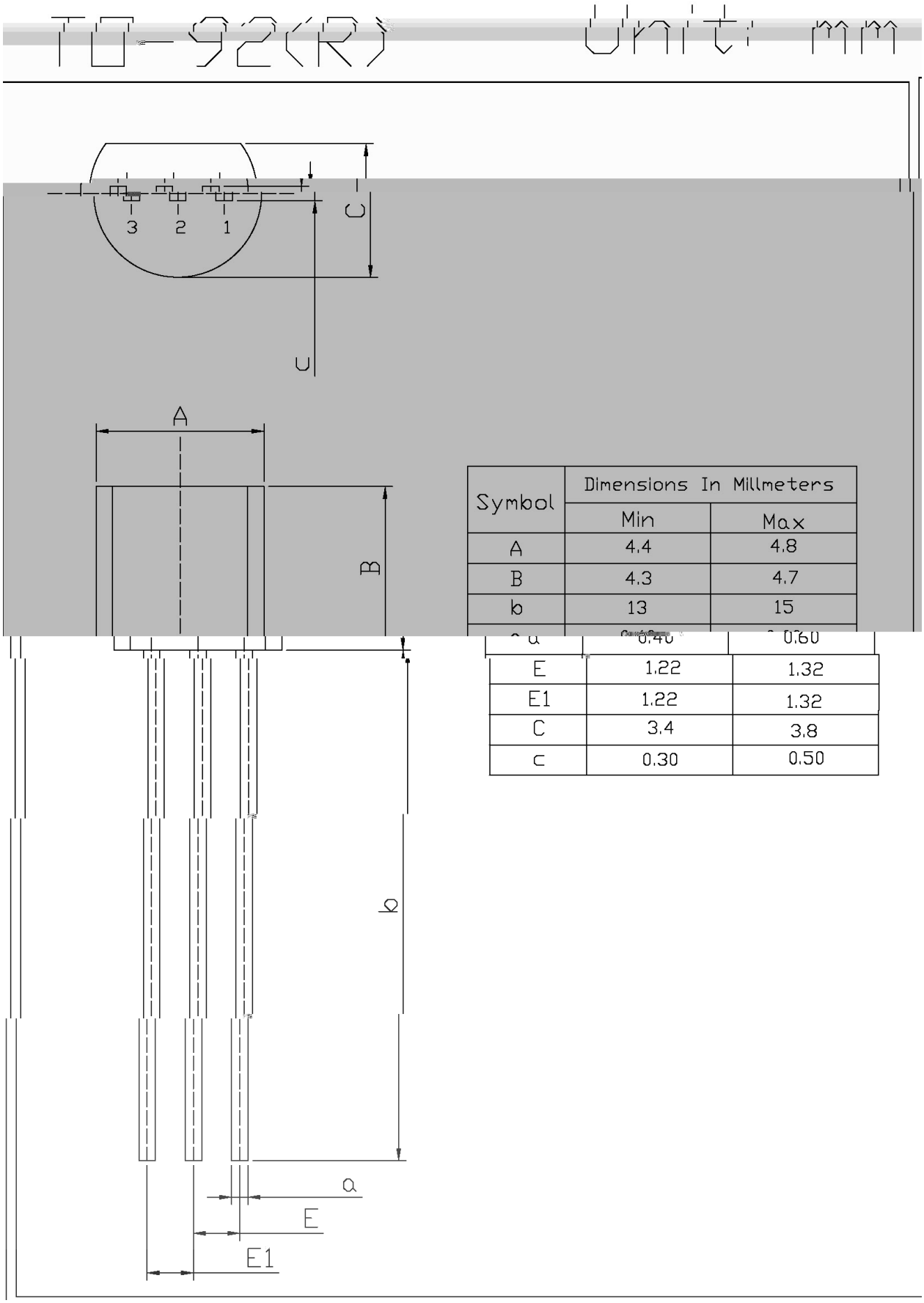
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	100	mA
Emitter Current - Continuous	I_E	-100	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	
Storage 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}=30V I_E=0			0.015	A
DC Current Gain	h_{FE}	V_{CE}=5.0V I_C=2.0mA	110		800	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA I_B=5.0mA			0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=100mA I_B=5.0mA		0.9	1.1	V
Base-Emitter Voltage	$V_{BE(1)}$	V_{CE}=5.0V I_C=2.0mA	0.58		0.7	V
	$V_{BE(2)}$	V_{CE}=5.0V I_C=10mA			0.75	V
Current Gain Bandwidth Product	f_T	V_{CE}=5.0V I_C=10mA f=100MHz		150		MHz
Transition Frequency	C_{ob}	V_{CB}=10V f=1.0MHz			4.5	pF
Noise Figure	NF	V_{CE}=6.0V I_C=0.1mA R_g=10K f=1.0KHz		1.0	10	dB

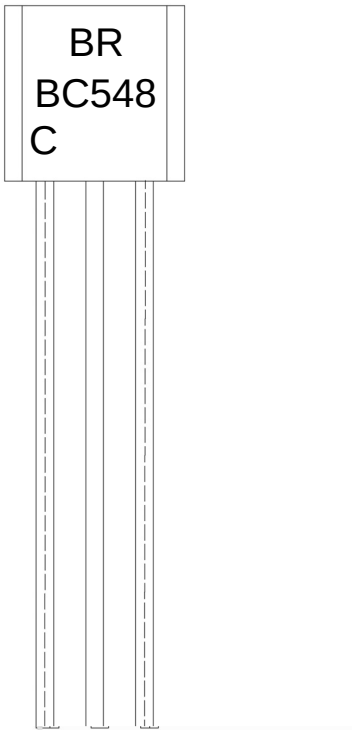
BC548

/ Package Dimensions



Symbol	Dimensions In Millmeters	
	Min	Max
A	4.4	4.8
B	4.3	4.7
b	13	15
d	0.40	0.60
E	1.22	1.32
E1	1.22	1.32
C	3.4	3.8
c	0.30	0.50

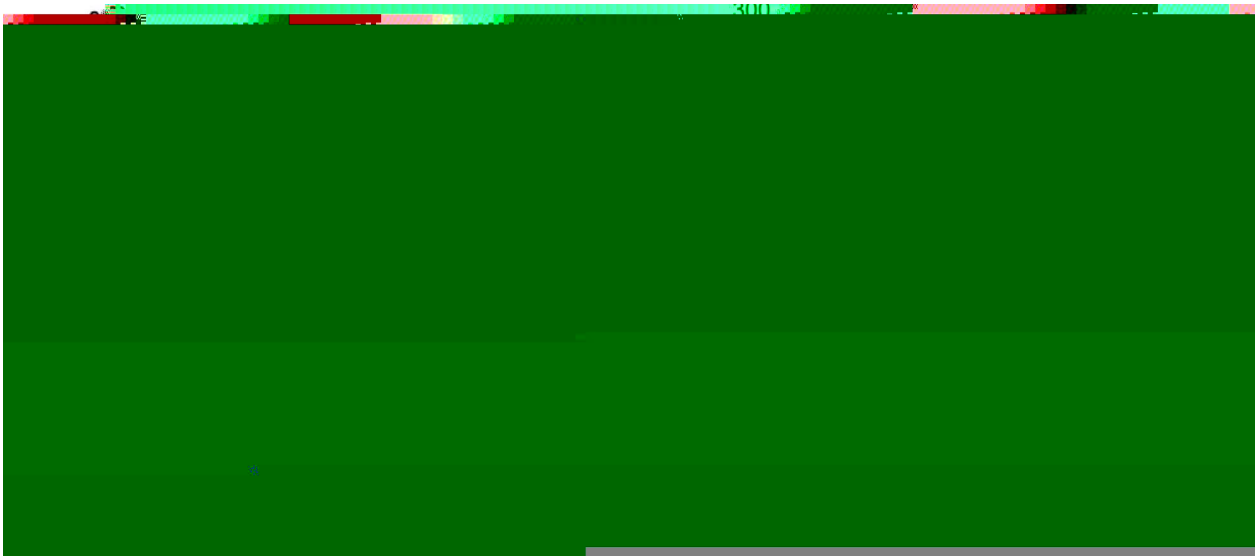
/ Marking Instructions



Note:

BR:	Company Code.
BC548:	Product Type.
C	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	Units					Dimension		(unit mm3)

/ AMMO

Package Type	Units					Dimension	(unit mm3)

/ Notices