

Silicon NPN transistor in a TO-92 Plastic Package.

Low on Resistance: $R_{on}=0.6\Omega(\text{Typ.})(I_B=1.0\text{mA})$.

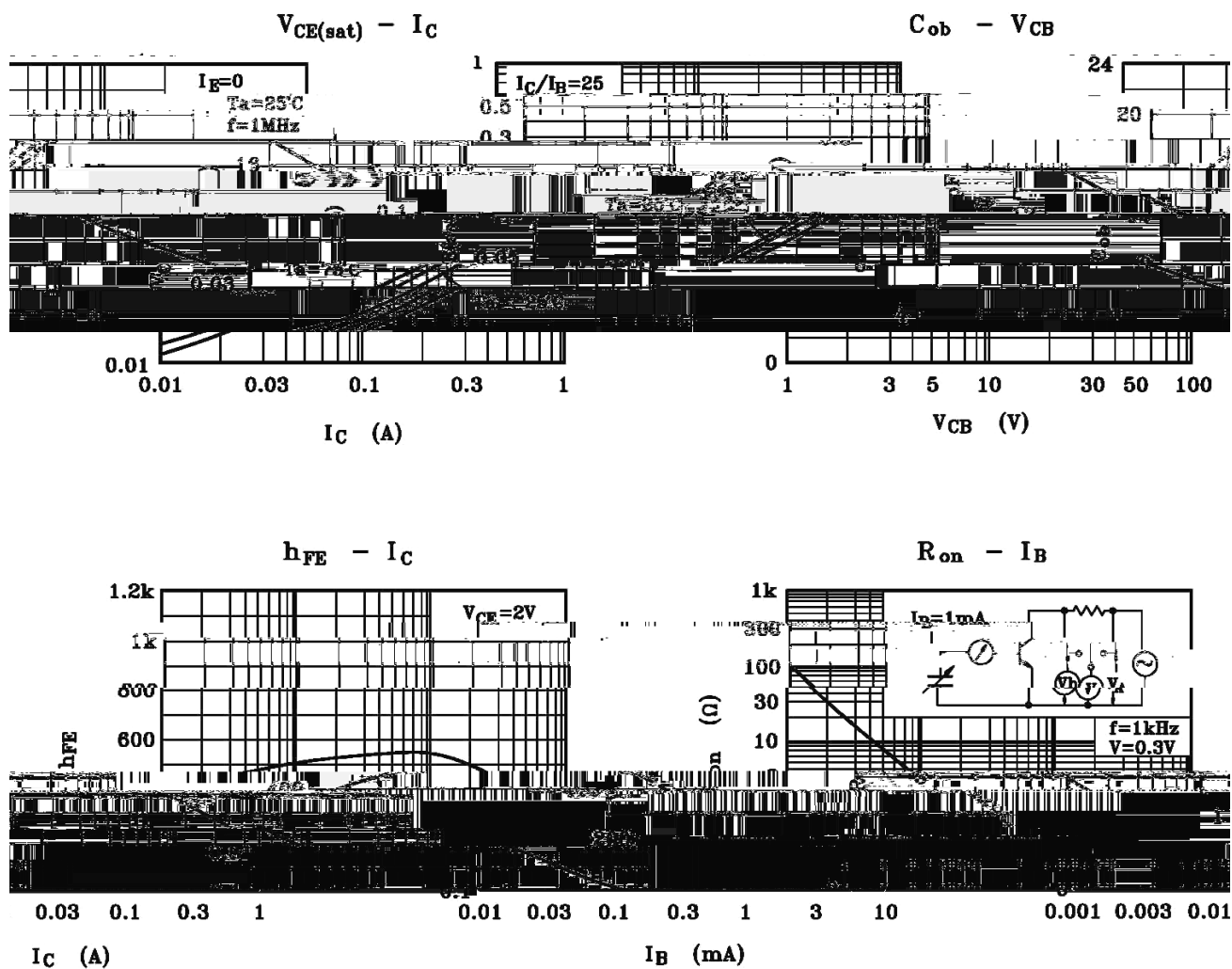
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V	25	V
Collector to Emitter Voltage	V _{CEO}	20	V
Emitter to Base Voltage	V _{EBO}	9.0	V
Collector Current - Continuous	I _C	300	mA
Base Current – Continuous	I _B	30	mA
Collector Power Dissipation	P _C	625	mW
Junction Temperature	T _J	150	
Storage Temperature Range	T _{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

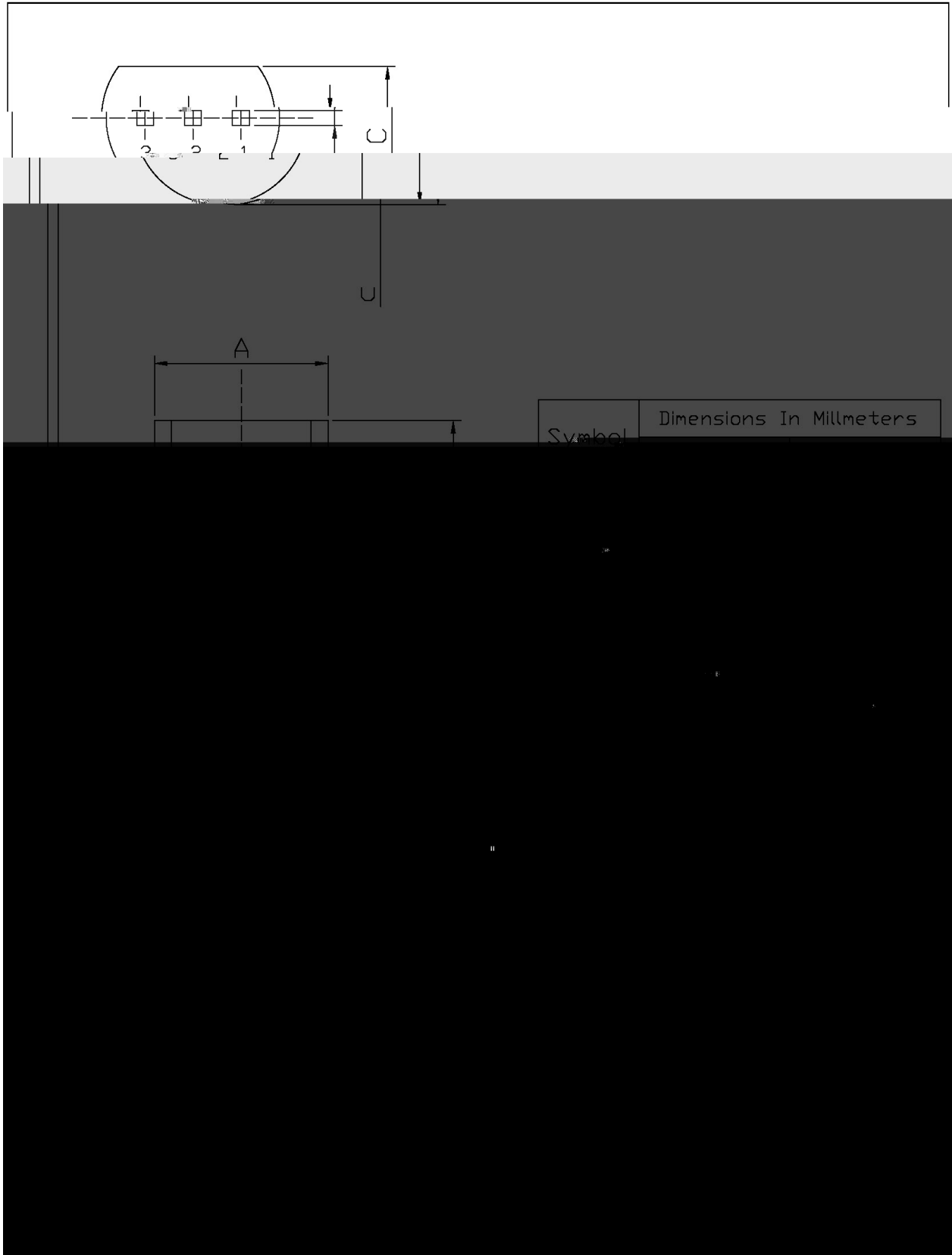
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I _{CBO}	V _{CB} =25V I _E =0			0.1	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =9.0V I _C =0			0.1	μA
DC Current Gain	h _{FE}	V _{CE} =2.0V I _C =4.0mA	200		800	
Collector to Emitter Saturation Voltage	V _{CE(sat)}	I _C =100mA I _B =10mA			0.25	V
Base to Emitter Saturation Voltage	V _{BE(sat)}	I _C =100mA I _B =10mA			1.0	V
Transition Frequency	f _T	V _{CE} =10V I _C =1.0mA		60		MHz
Collector Output Capacitance	C _{ob}	V _{CB} =10V f=1.0MHz I _E =0		10		pF
On Resistance	R _{on}	f=1.0KHz I _B =1.0mA V _{in} =0.3V		0.6		Ω

/ Electrical Characteristic Curve

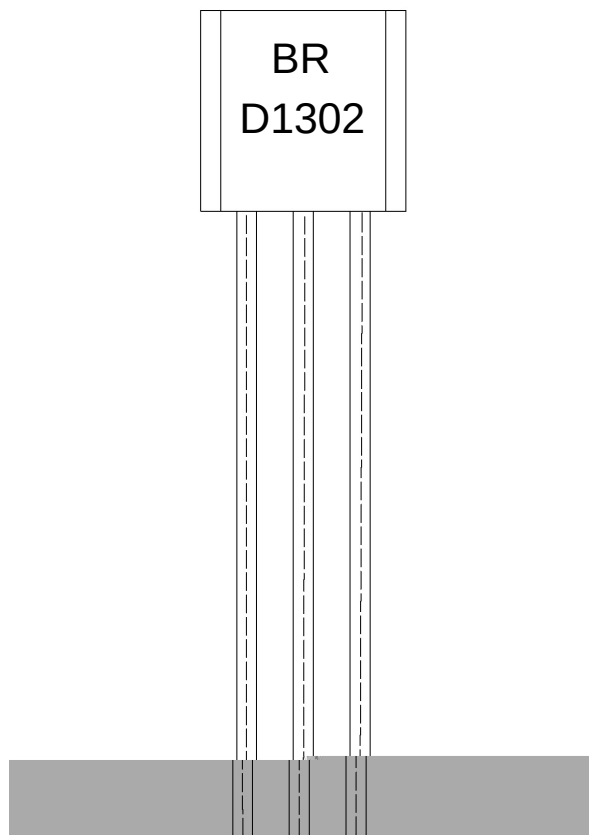


T0-92

Unit: mm



/ Marking Instructions



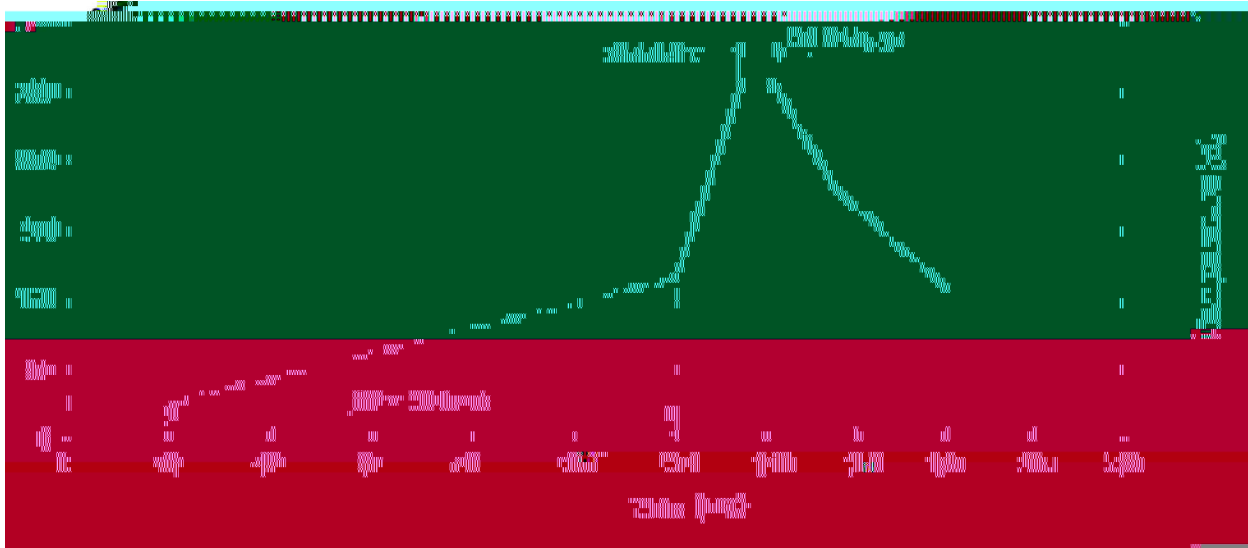
Note:

BR: Company Code.

D1302: Product Type.

***: 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
							小箱 , 大箱

/ Notices