

TO-92 NPN Silicon NPN transistor in a TO-92 Plastic Package.

High reverse h_{FE} reverse: $h_{FE}=150(V_{CE}=-2V, I_C=-4mA)$, low on resistance.

For muting and switching applications.

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	25	V
Collector Current - Continuous	I_C	300	mA
Base Current - Continuous	I_B	60	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	125	
Storage Temperature Range	T_{stg}	-55 125	

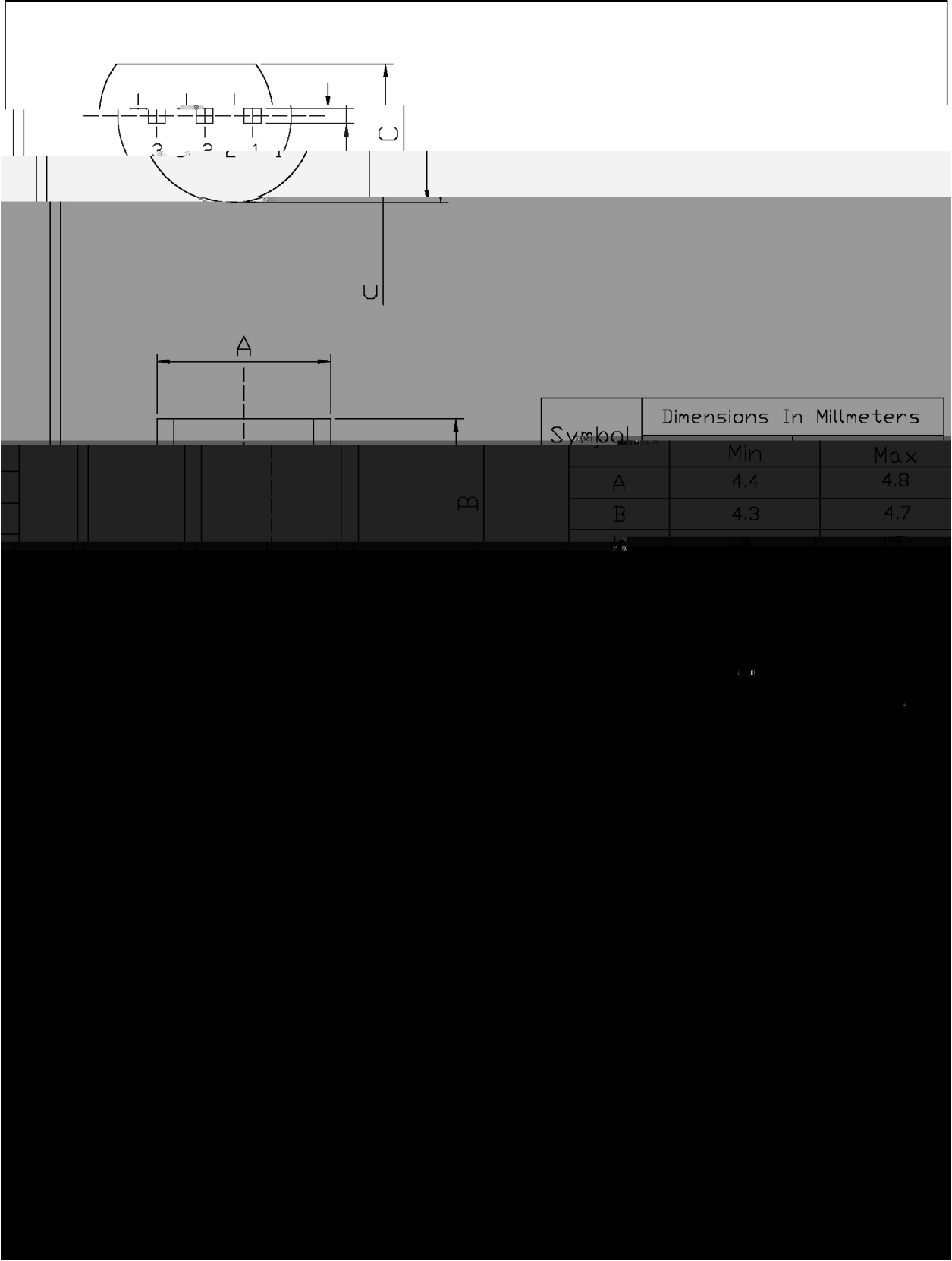
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=50V$ $I_E=0$			0.1	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=25V$ $I_C=0$			0.1	A
DC Current Gain	h_{FE}	$V_{CB}=2.0V$ $I_C=4.0mA$	200		1200	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=30mA$ $I_B=3.0mA$		0.042	0.1	V
Base-to-Emitter Voltage	V_{BE}	$V_{CE}=2.0V$ $I_C=4.0mA$		0.61		V
Transition Frequency	f_T	$V_{CE}=6.0V$ $I_C=4.0mA$		30		MHz
Output Capacitance	C_{ob}	$V_{CB}=10V$ $f=1.0MHz$ $I_E=0$		4.8	7.0	pF
Turn-On Time	t_{on}	$V_{IN}=10V$				

/ Electrical Characteristic Curve

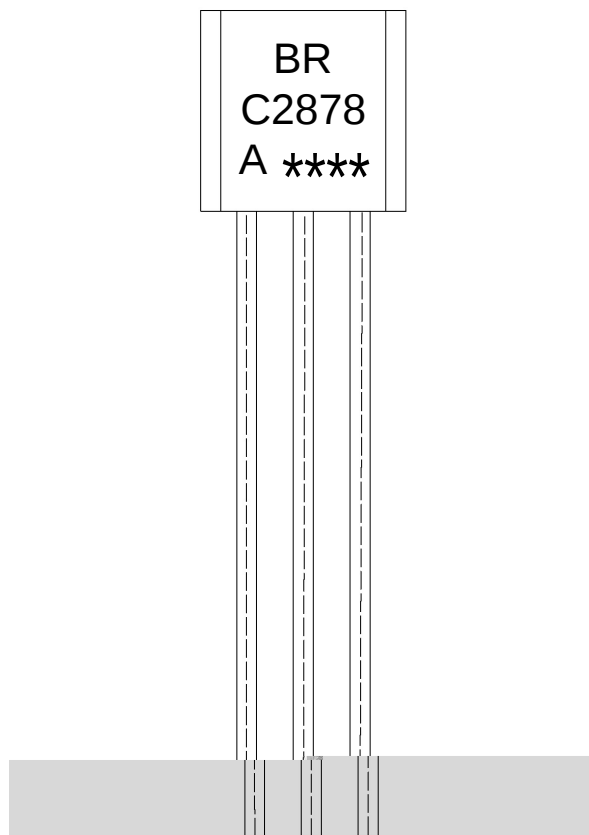
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



BR:

C2878

A: h_{FE}

Note:

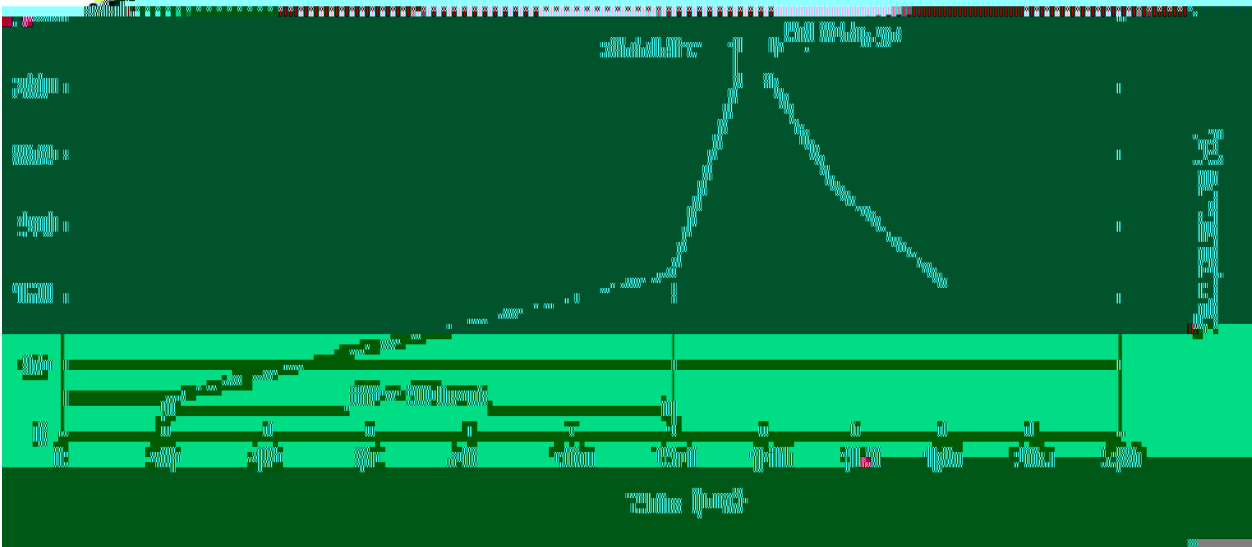
BR: Company Code.

C2878: Product Type.

A: 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;
- 2

255±5

5±0.5sec;
- 3

2 10

/sec.
- 1.Preheating:25~150

, Time:60~90sec.
- 2.Peak Temp.:255±5

, Duration:5±0.5sec.
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)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱