

Silicon PNP transistor in a TO-92 Plastic Package.

High breakdown voltage, Low drain current.

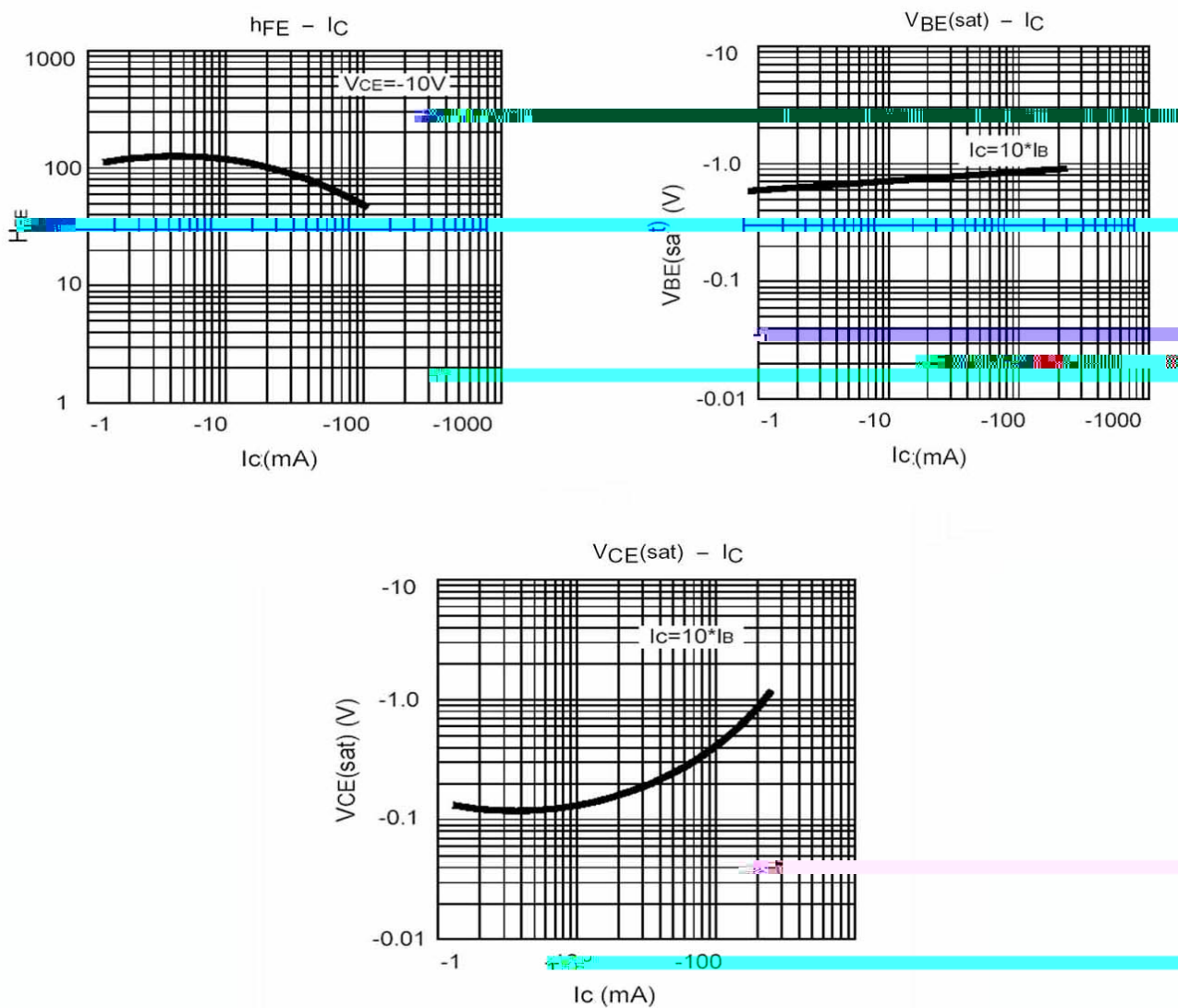
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-400	V
Collector to Emitter Voltage	V_{CEO}	-400	V
Emitter to Base Voltage	V_{EBO}	-6.0	V
Collector Current - Continuous	I_C	-500	mA
Collector Power Dissipation	P_C	1.0	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-100\mu A$ $I_E=0$	-400			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-1.0mA$ $I_B=0$	-400			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-400V$ $I_E=0$			-10	μA
Collector Cut-Off Current	I_{CEO}	$V_{CB}=-200V$ $V_{BE}=0$			-1.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-6.0V$ $I_C=0$			-0.2	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-10V$ $I_C=-20mA$	50		200	
	$h_{FE(2)}$	$V_{CE}=-10V$ $I_C=-1.0mA$	50			
	$h_{FE(3)}$	$V_{CE}=-10V$ $I_C=-80mA$	40			
Collector to Emitter Saturation Voltage ₍₁₎	$V_{CE(sat)(1)}$	$I_C=-20mA$ $I_B=-2.0mA$			-0.2	V
Collector to Emitter Saturation Voltage ₍₂₎	$V_{CE(sat)(2)}$	$I_C=-80mA$ $I_B=-4.0mA$			-1.2	V
Base to Emitter Voltage	V_{BE}	$I_C=-20mA$ $I_B=-2.0mA$			-0.9	V
Transition Frequency	f_T	$V_{CE}=-20V$ $f=1.0MHz$ $I_E=-10mA$	10			MHz
Output Capacitance	C_{ob}	$V_{CB}=-20V$ $f=1.0MHz$ $I_E=0mA$			30	pF

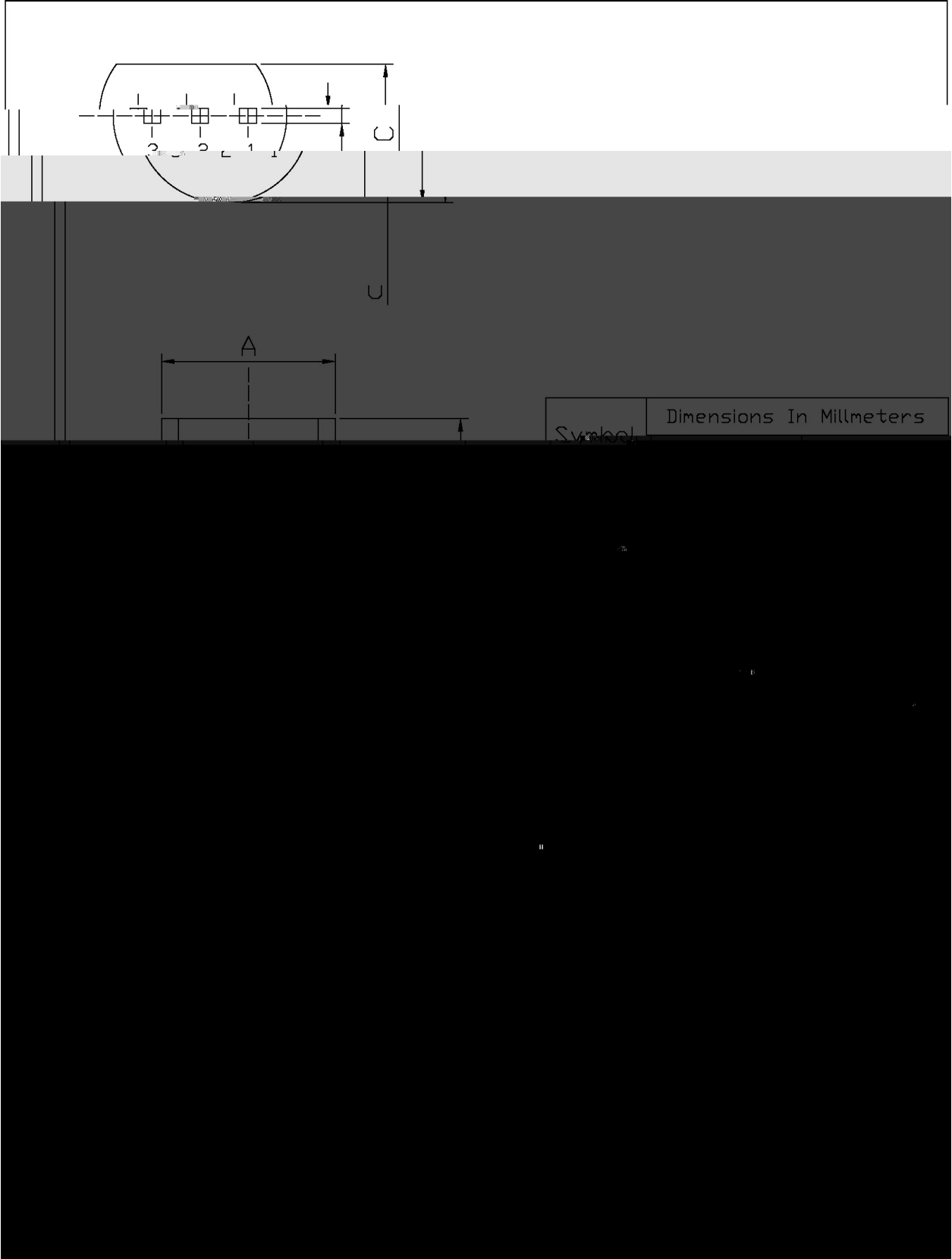
/ Electrical Characteristic Curve



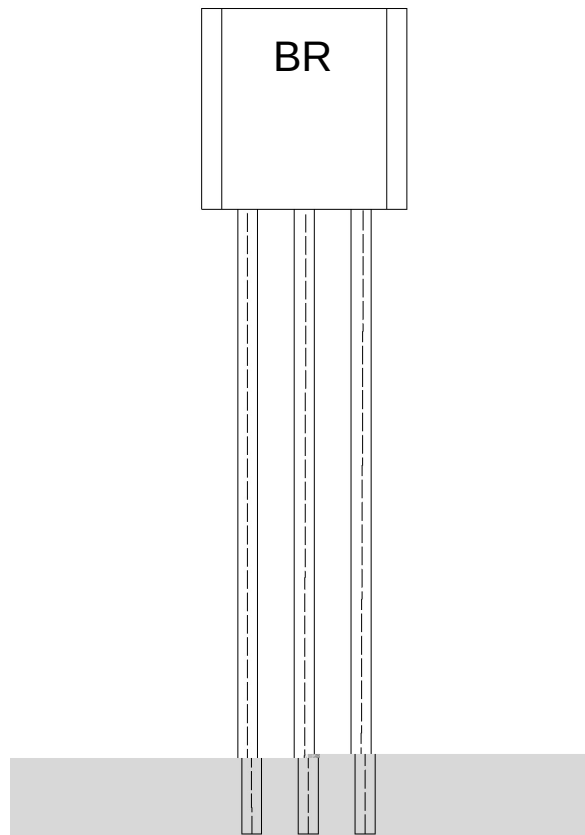
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



Note:

BR: Company Code.

A194: 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	Units					Dimension (unit mm3)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

/ AMMO

Package Type	Units					Dimension (unit mm3)	
	Units/tape /	Tape/Inner Box /	Rows/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Inner Box	Outer Box
TO-92	3,000	1	120	10	30,000	328×230×42	480×346×235
							547×407×268

/ Notices