

/ Descriptions

Silicon PNP transistor in a TO-92 Plastic Package.

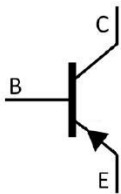
/ Features

High P_C and I_C .

/ Applications

Medium power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Collector PIN 2 Base PIN 3 Emitter

/ hFE Classifications & Marking

See Marking Instructions.

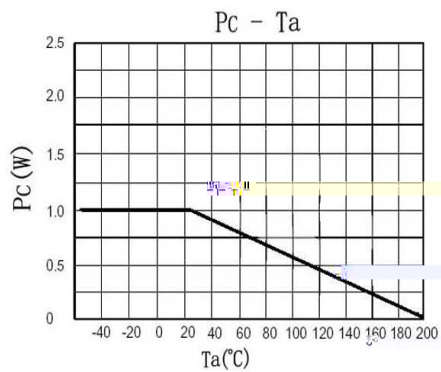
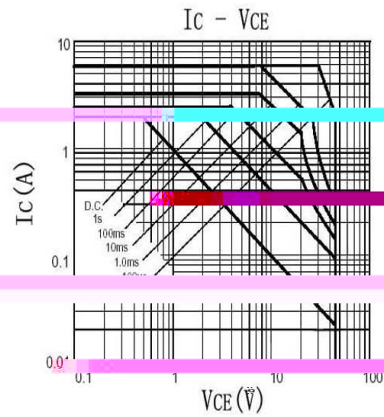
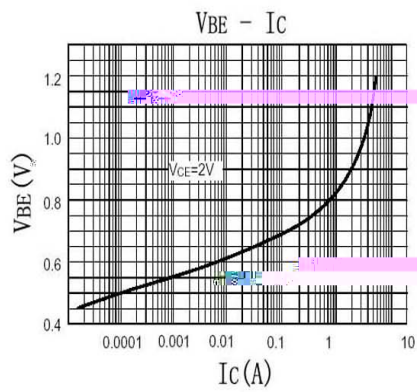
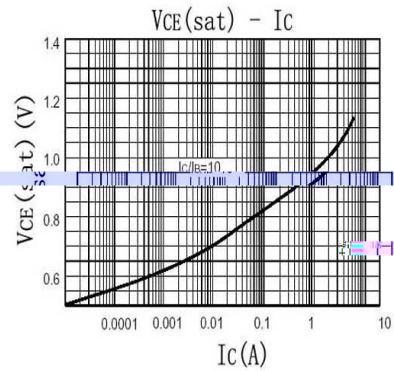
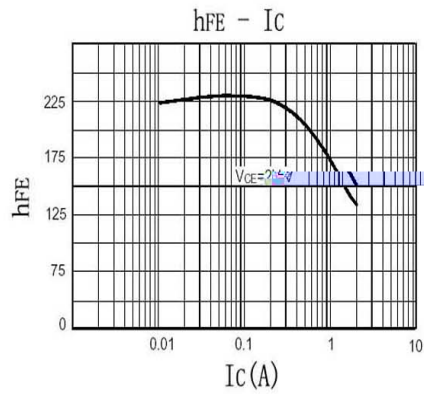
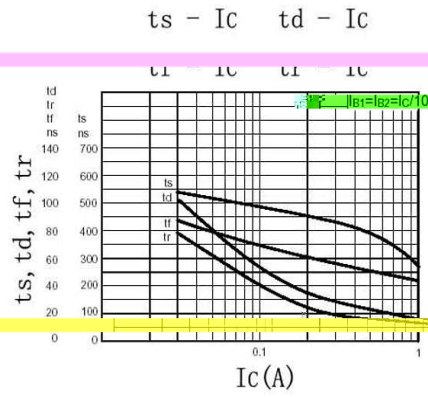
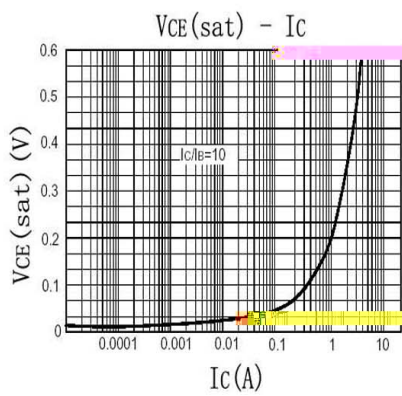
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-2.0	A
Peak Collector Current- Continuous	I_{CM}	-6.0	A
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}	$I_C=-100\text{ A}$	-60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-10\text{mA}$	-45			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-100\text{ A}$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-45\text{V}$ $I_E=0$			-0.1	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-4.0\text{V}$ $I_C=0$			-0.1	A
DC Current Gain	h_{FE}	$I_C=-500\text{mA}$ $V_{CE}=-2.0\text{V}$	100		300	
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=-1.0\text{A}$ $I_B=-100\text{mA}$		-0.15	-0.3	V
	$V_{CE(sat)(2)}$	$I_C=-2.0\text{A}$ $I_B=-200\text{mA}$		-0.28	-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-1.0\text{A}$ $I_B=-100\text{mA}$		-0.9	-1.25	V
Transition Frequency	f_T	$V_{CE}=-5.0\text{V}$ $I_C=-100\text{mA}$ $f=100\text{MHz}$	100	140		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}$ $f=1.0\text{MHz}$			30	pF
Turn-On Time	T_{on}	$V_{CC}=-10\text{V}$ $I_C=-500\text{mA}$ $I_{B1}=I_{B2}=-50\text{mA}$		40		ns
Turn-Off Time	T_{off}	$V_{CC}=-10\text{V}$ $I_C=-500\text{mA}$ $I_{B1}=I_{B2}=-50\text{mA}$		450		ns

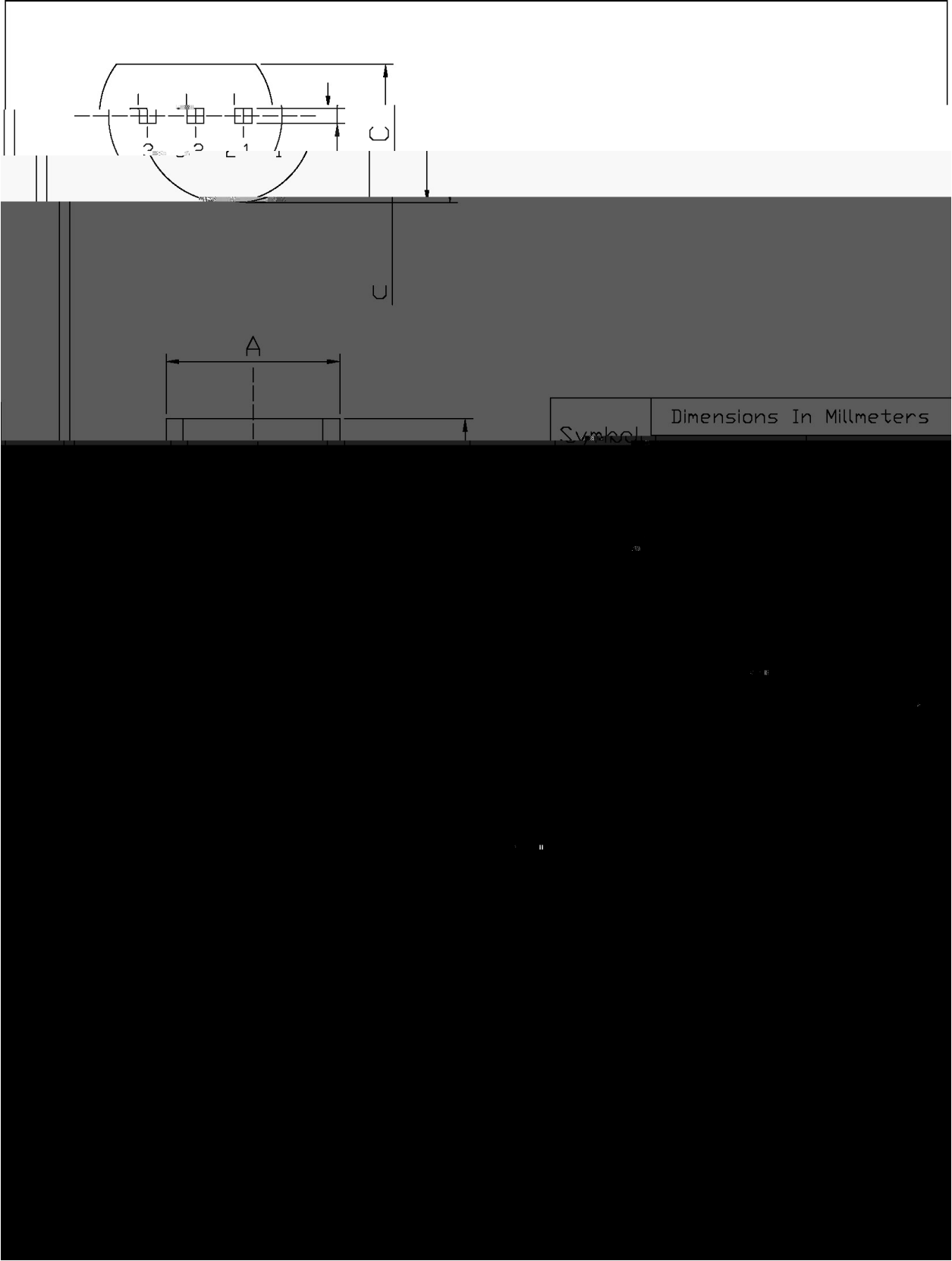
/ Electrical Characteristic Curve



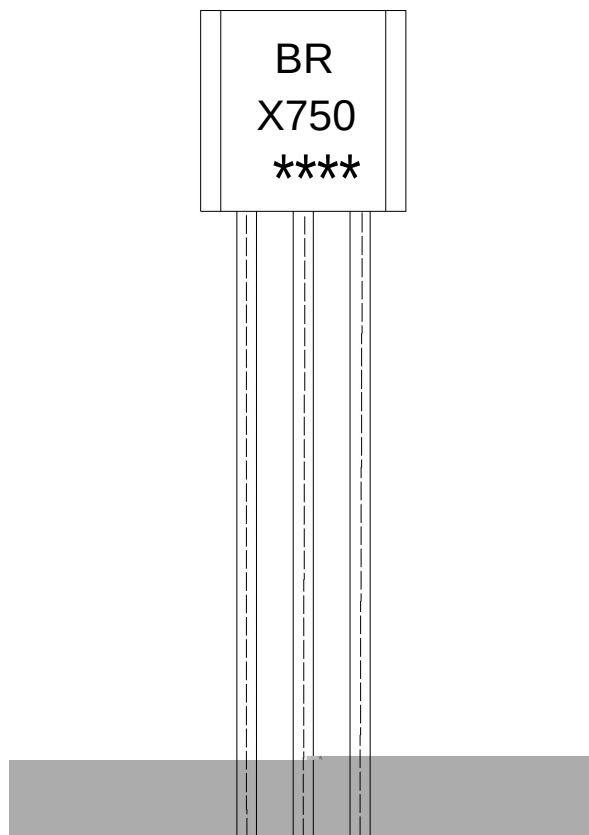
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



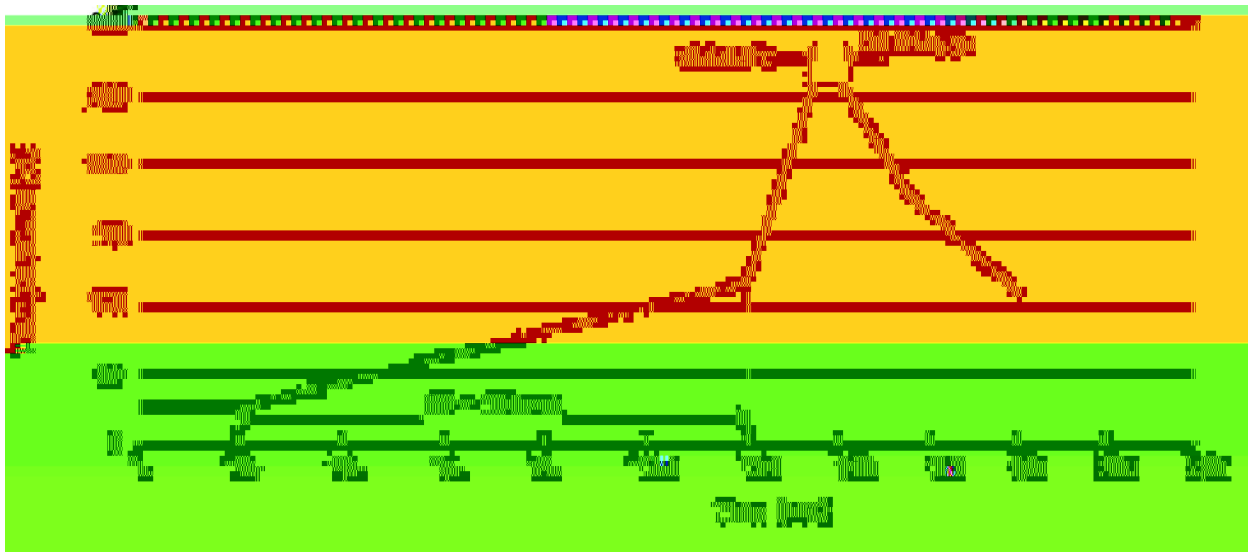
Note:

BR: Company Code.

X750: 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)		
	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
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 封装形式	Units 包装数量			Dimension 包装尺寸 (unit: mm3)
	Units/tape 只/纸带	Tape/Inner Box 纸带/盒	Rows/Inner Box 纸带	