/ Descriptions

TO-251 PNP Silicon PNP transistor in a TO-251 Plastic Package.

/ Features

, h_{FE}

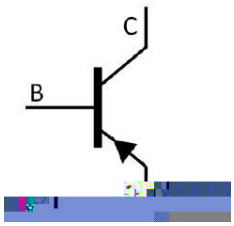
Low saturation voltage, excellent h_{FE} linearity and high h_{FE}.

/ Applications

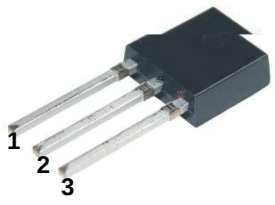
3 , ,

Output stage of 3 watts audio amplifier, voltage regulator, DC-DC converter and relay driver.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	R	Q	P	E
h_{FE} Range	60 120	100 200	160 320	200 400

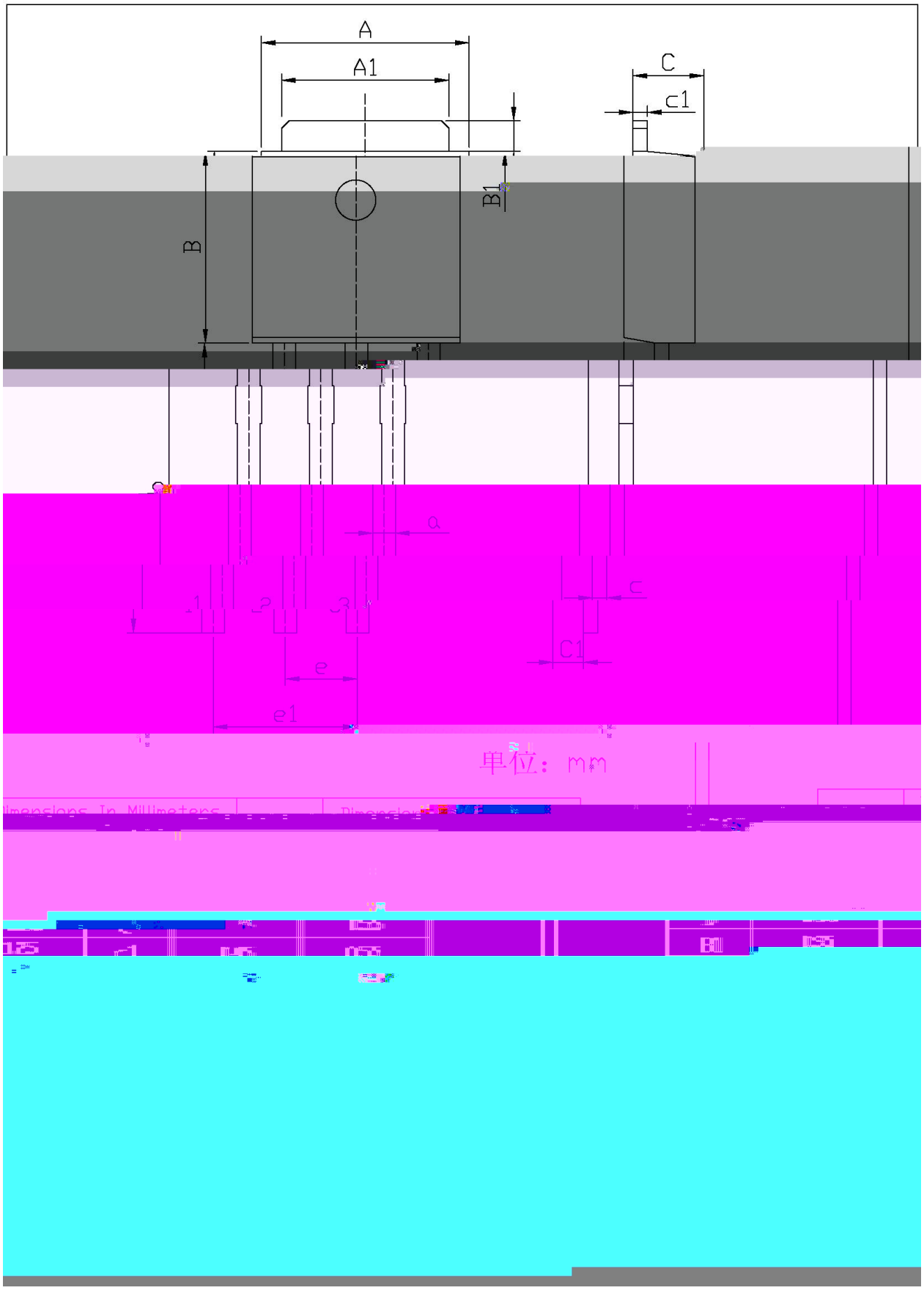
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-3.0	A
Collector Power Dissipation	P_C	1.0	W
Collector Power Dissipation	$P_C(T_C=25$)	10	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

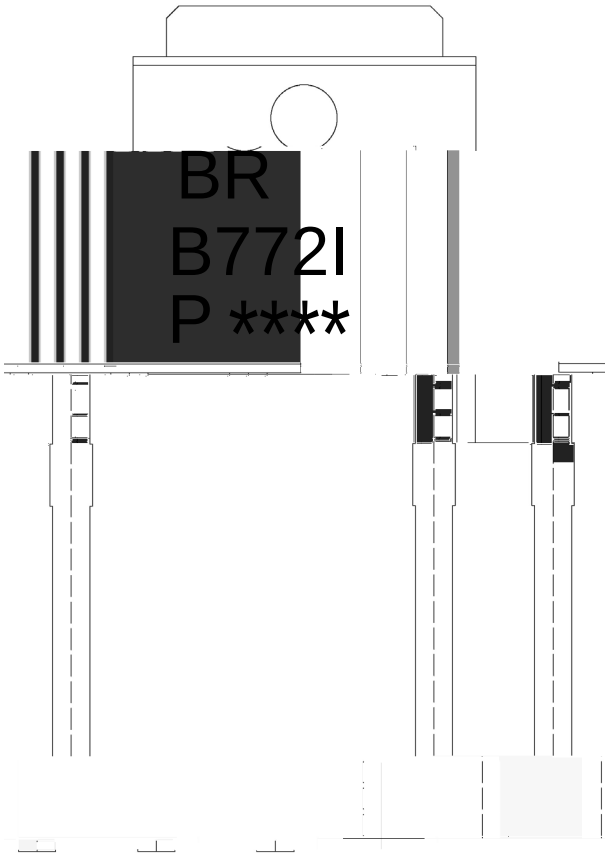
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V I_E=0			-1.0	A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-3.0V I_C=0			-1.0	A
DC Current Gain	$h_{FE(1)}$	V_{CE}=-2.0V I_C=-1.0A	60	160	400	
	$h_{FE(2)}$	V_{CE}=-2.0V I_C=-20mA	30	220		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-2.0A I_B=-0.2A		-0.3	-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-2.0A I_B=-0.2A		-1.0	-2.0	V
Transition Frequency	f_T	I_C=-0.1A V_{CE}=-5.0V		80		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1.0MHz		55	-5.3pF	

/ Package Dimensions



/ Marking Instructions



BR

B772I

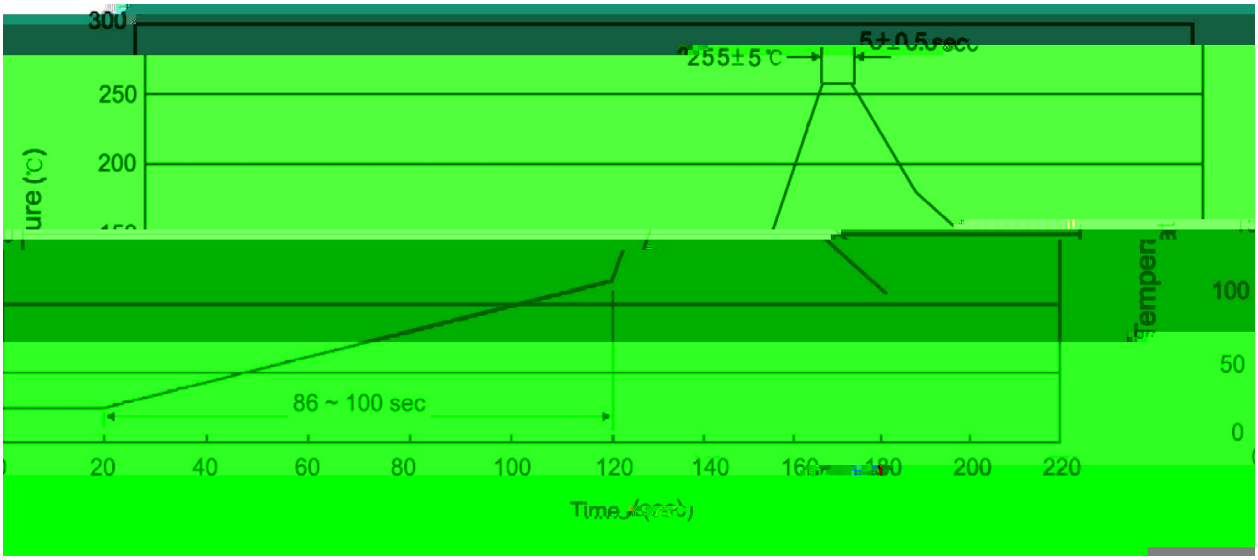
P: h_{FE}

****

Note:

BR:	Company Code
B772I:	Product Type.
P:	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)
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-251	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension		(unit mm³)
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices