TO-220F NPN Silicon NPN transistor in a TO-220F Plastic Package.

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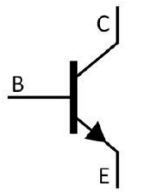
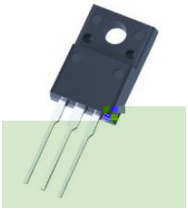
High DC current gain, low $V_{CE(sat)}$,large collector power dissipation, wide SOA.

Low frequency power amplifier.





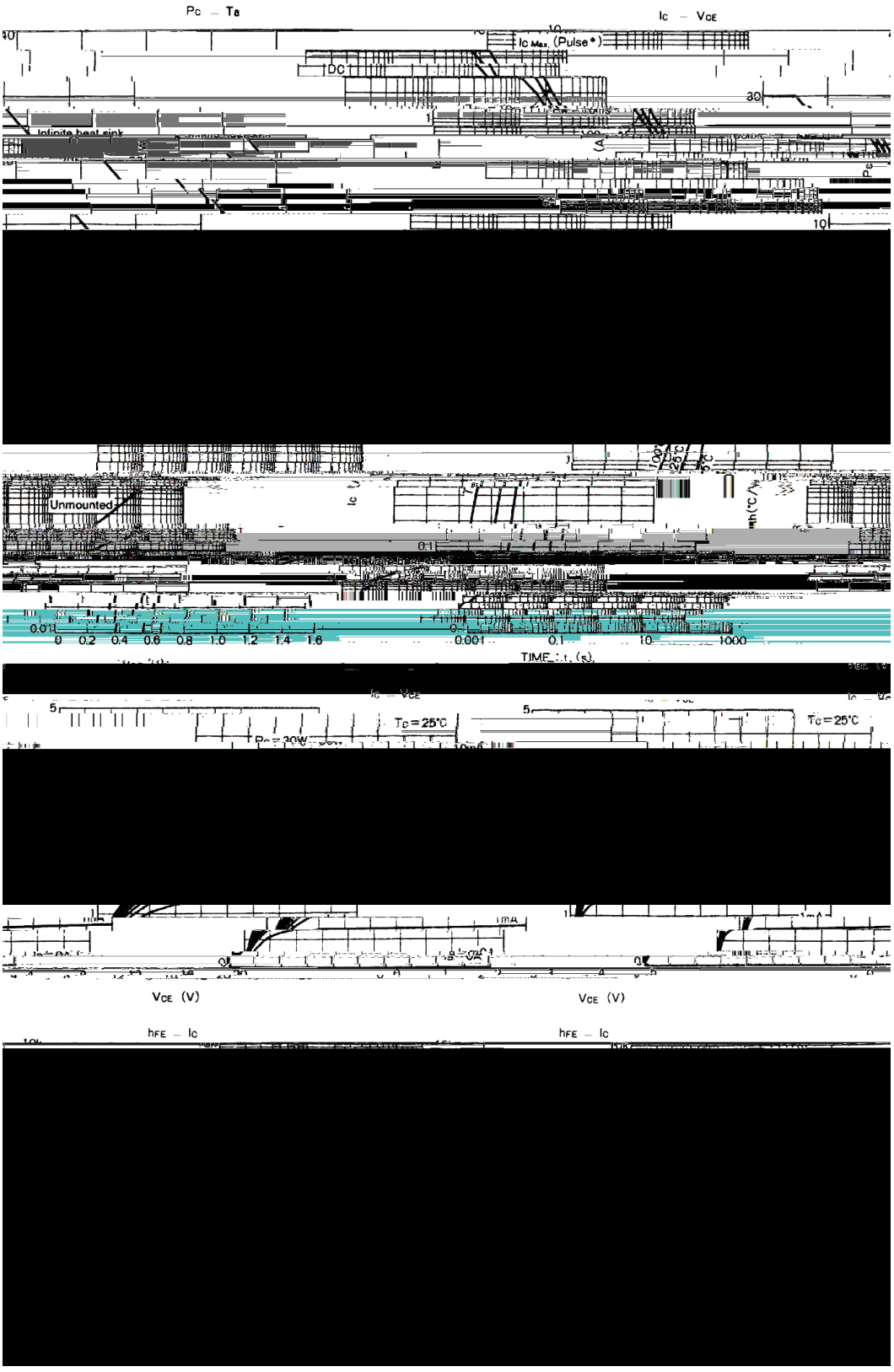
PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

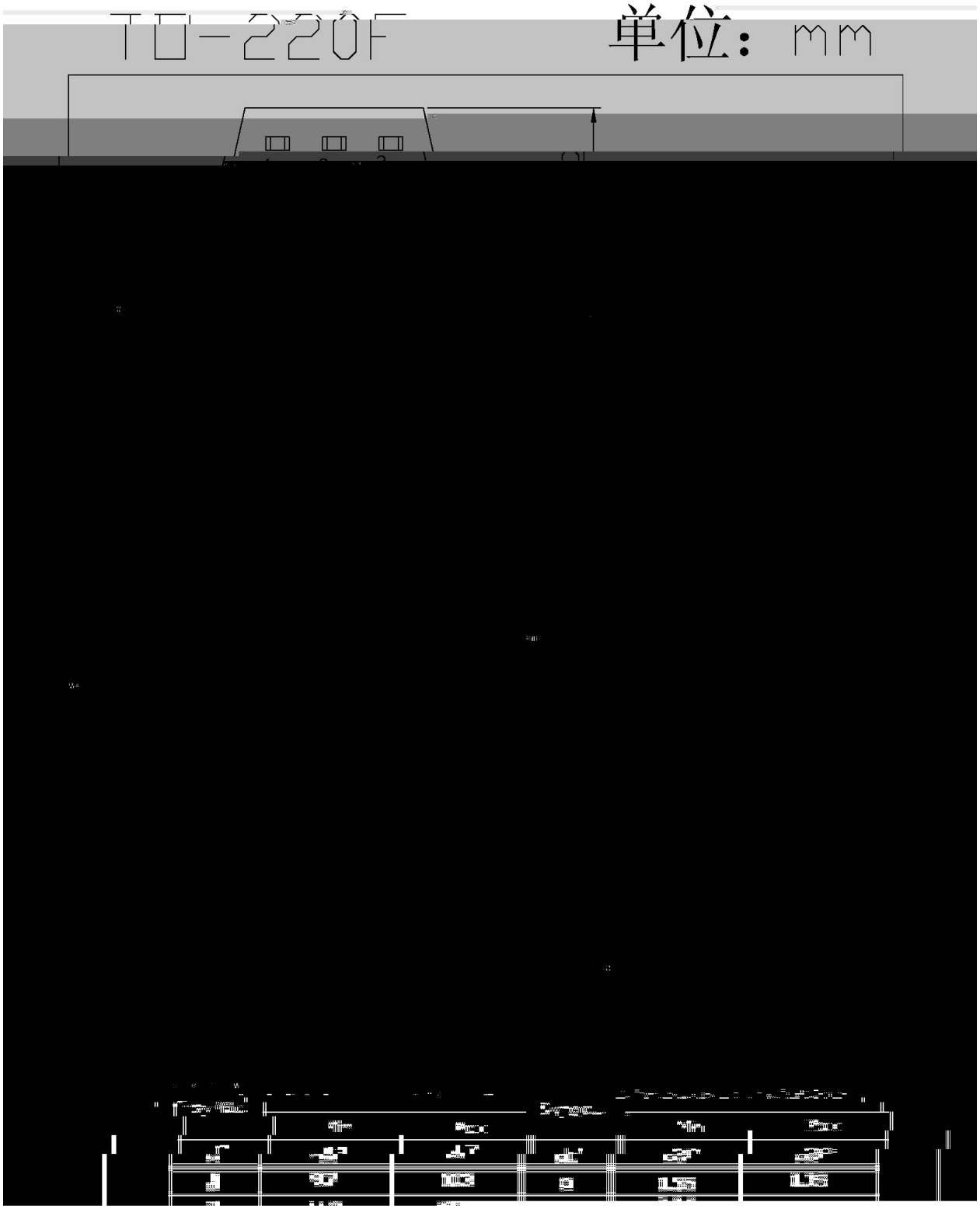
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	3.0	A
Collector Current – Continuous(Pulse)	I_{CP}	6.0	A
Collector Power Dissipation	P_C	2.0	W
	P_C(Tc=25)	30	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=50μA	80			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA	60			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=50μA	6.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=80V I_E=0			100	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=6.0V I_C				

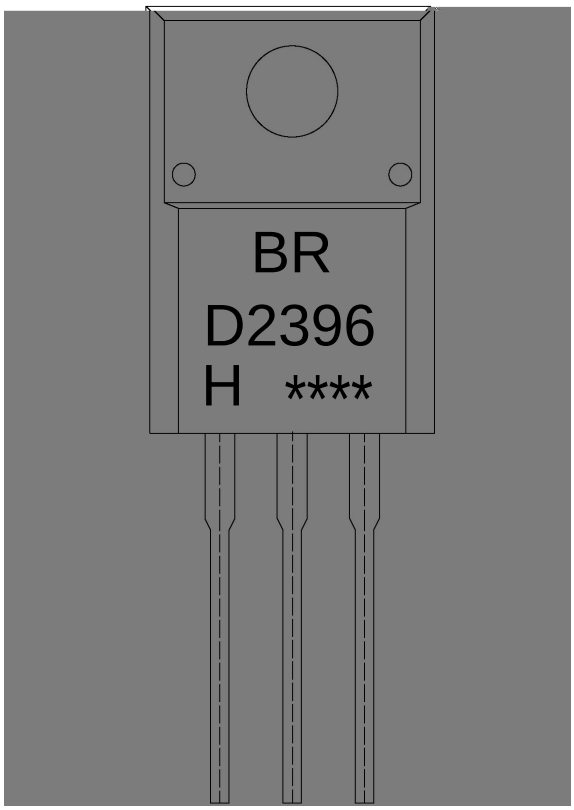
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

D2396

H: h_{FE}

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Note:

BR:	Company Code.
D2396:	Product Type.
H:	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 mm^3)
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner	