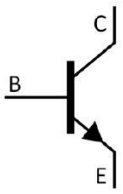
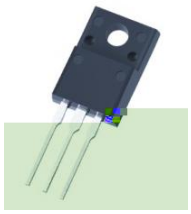
TO-220F NPN Silicon NPN transistor in a TO-220F Plastic Package.

High V_{CEO},SOA, High transition frequency and small C_{ob}.

power amplifier applications.

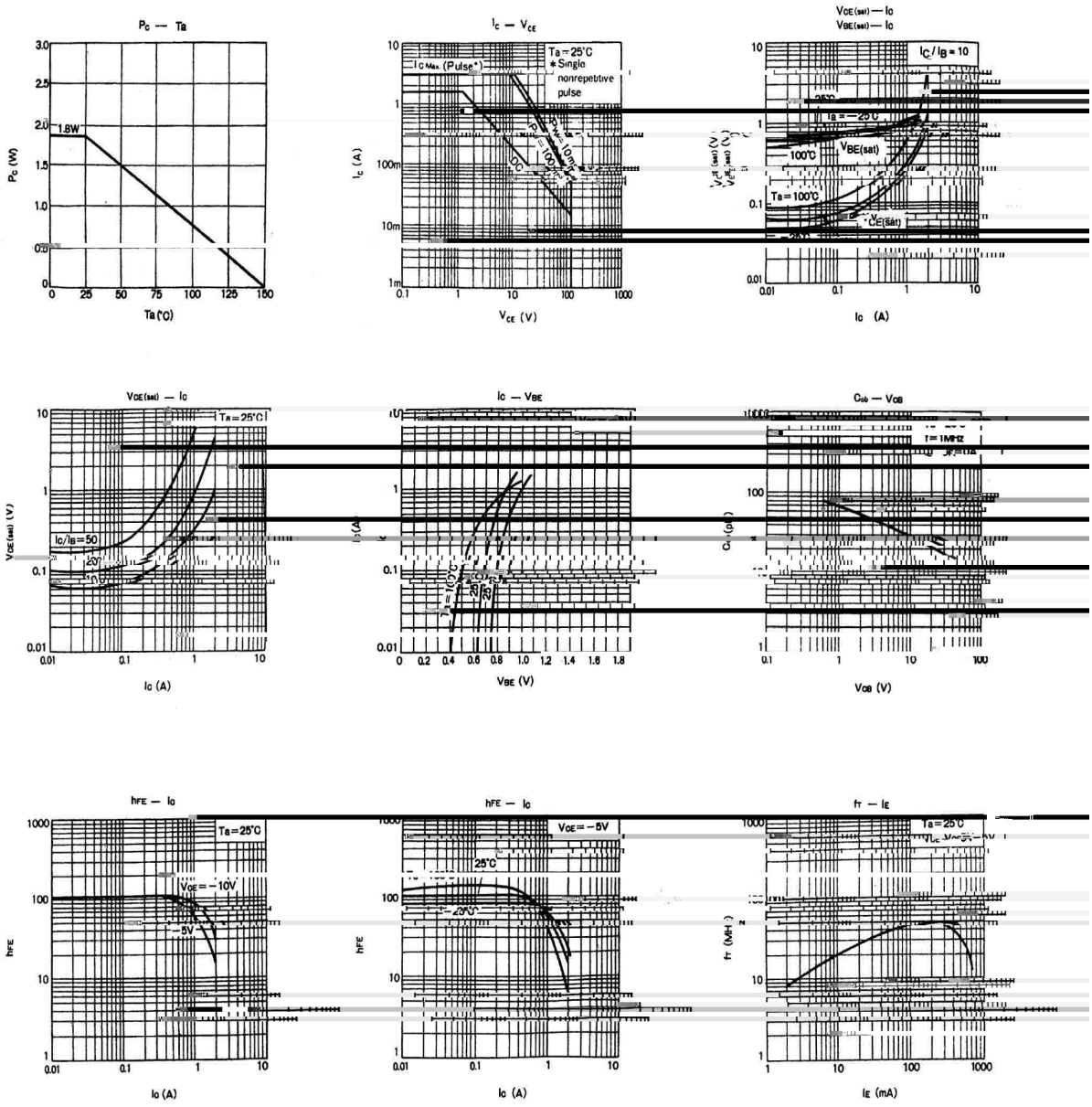




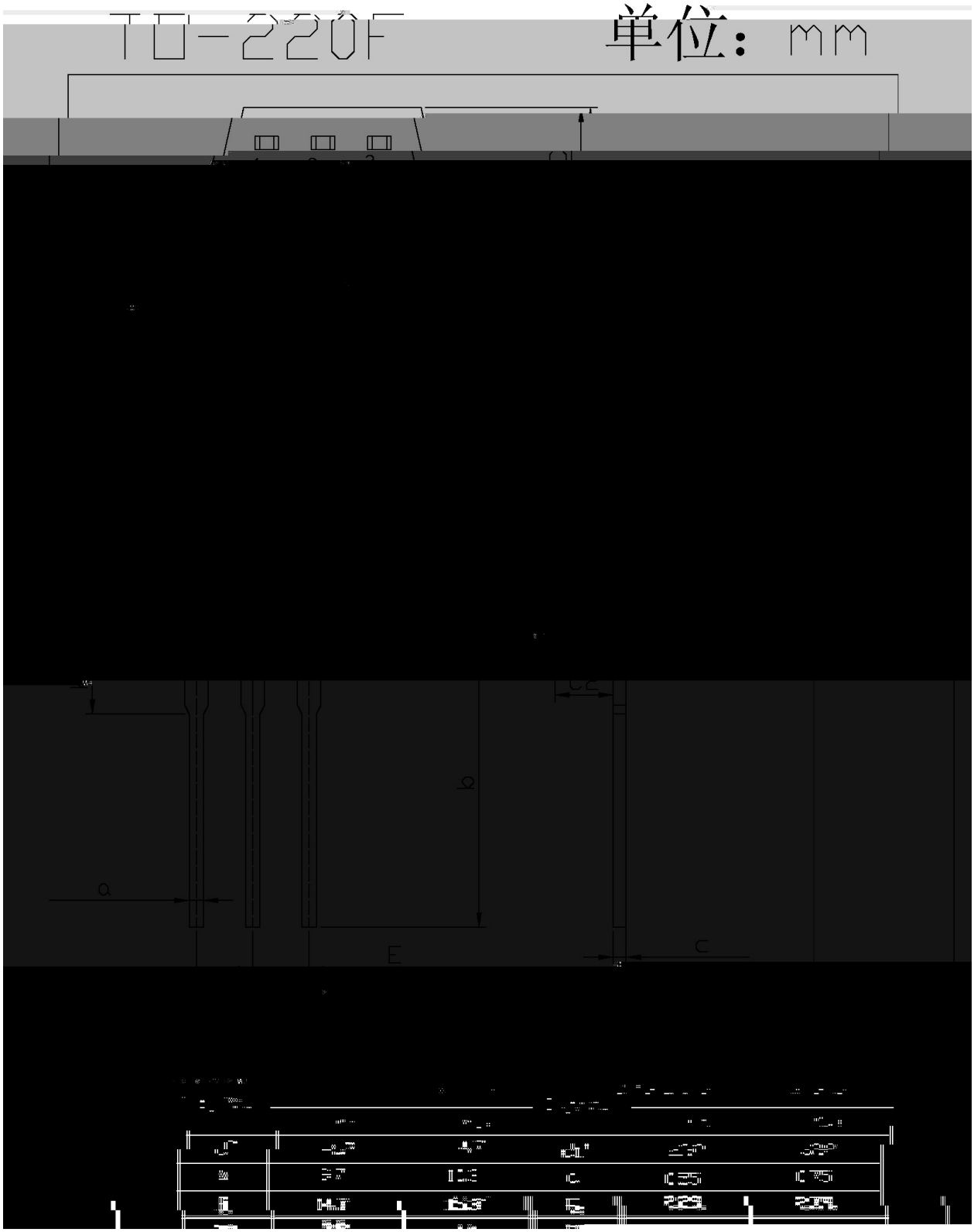
PIN1 Base PIN 2 Ẽ xF(6T2q)q7•

Parameter	Symbol	Rating	Unit

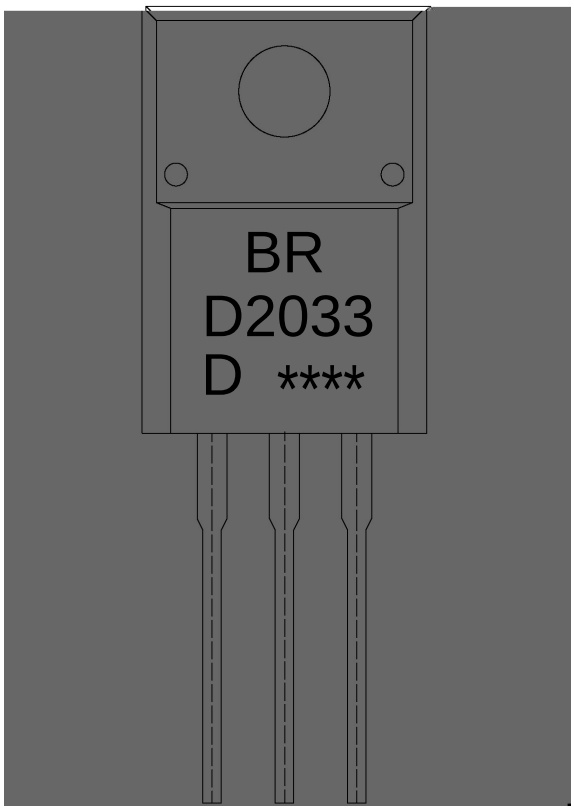
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

D2033

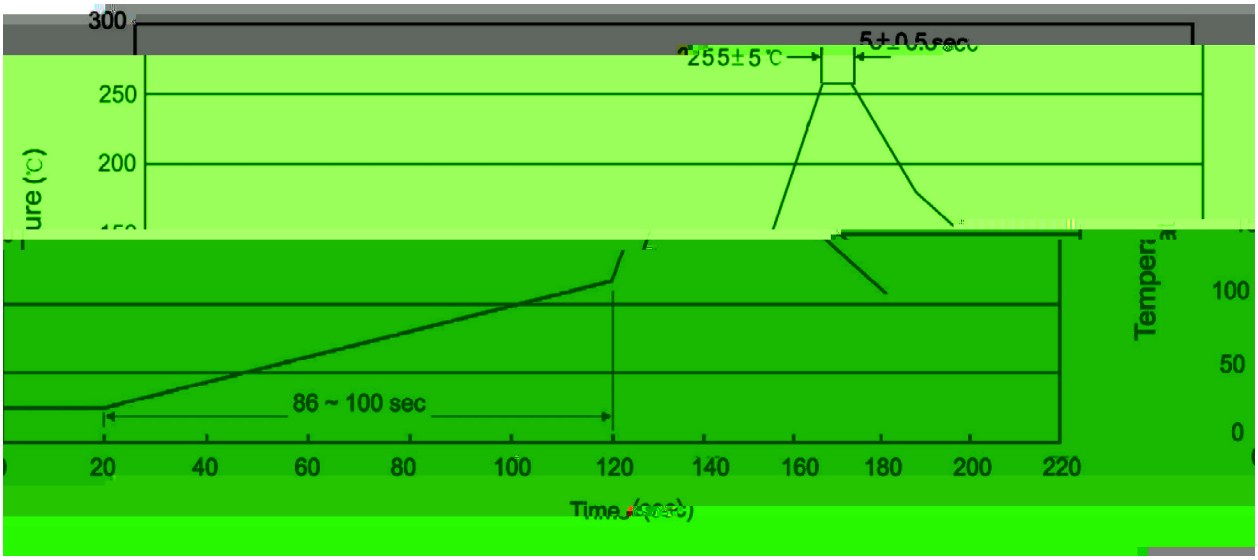
D: h_{FE}

****

Note:

BR:	Company Code.
D2033:	Product Type.
D:	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-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units		Dimension	(unit mm³)
	Units/TubeT T /			