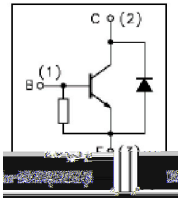


## / Descriptions

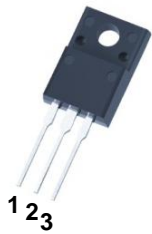
TO-220F      NPN

$C_{BO} = 1500V$ )

MBIT



## / Pinning



## / $h_{FE}$

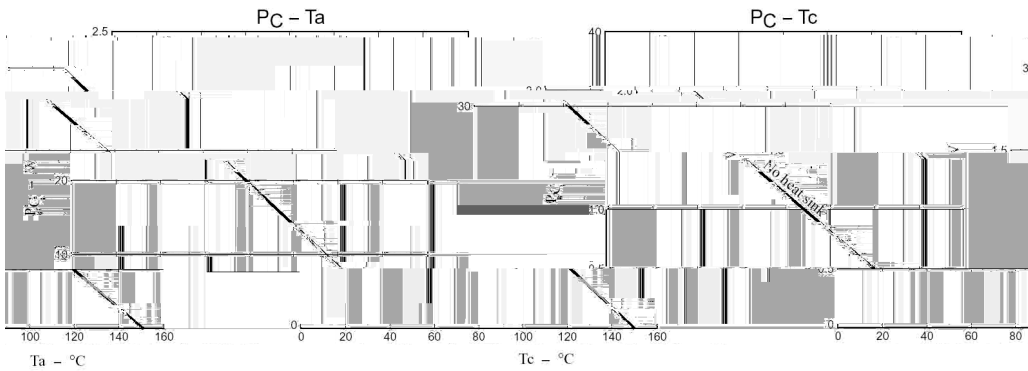
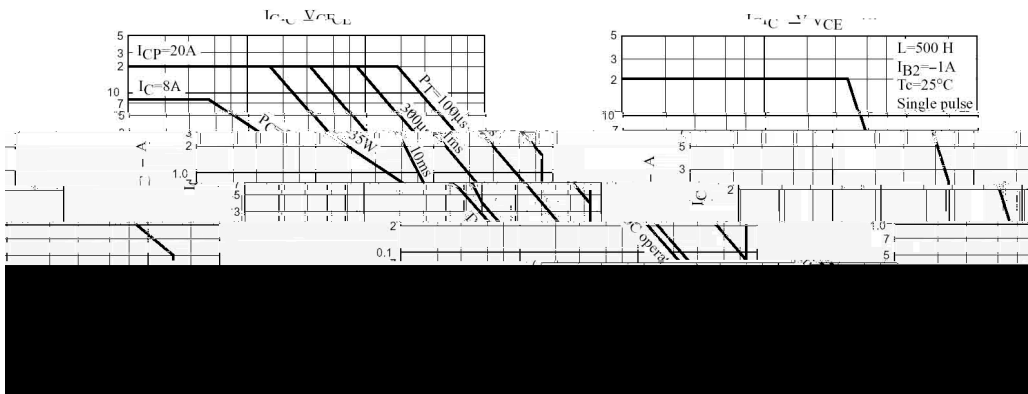
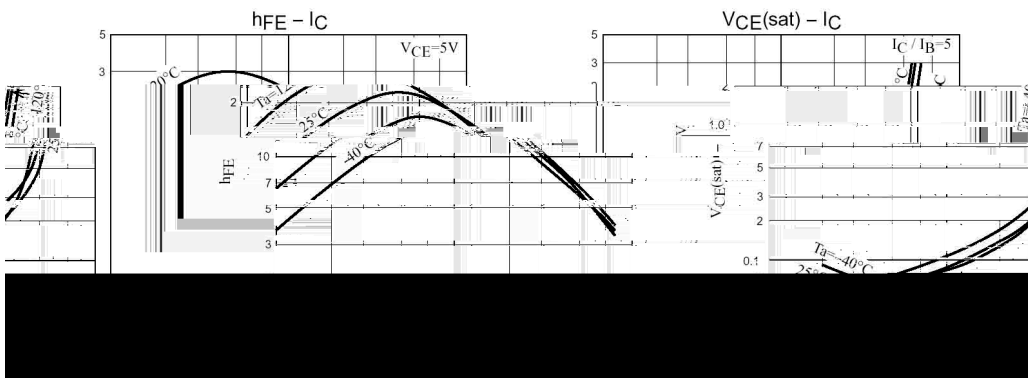
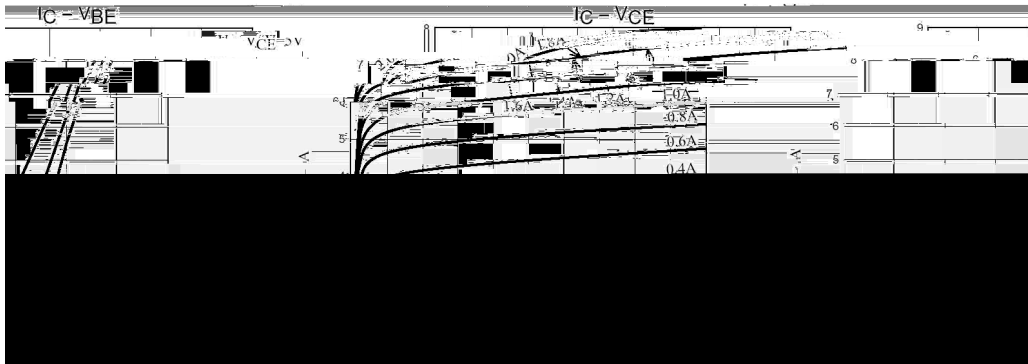
**/ Absolute Maximum Ratings(Ta=25 )**

		°C	
			°C
			°C

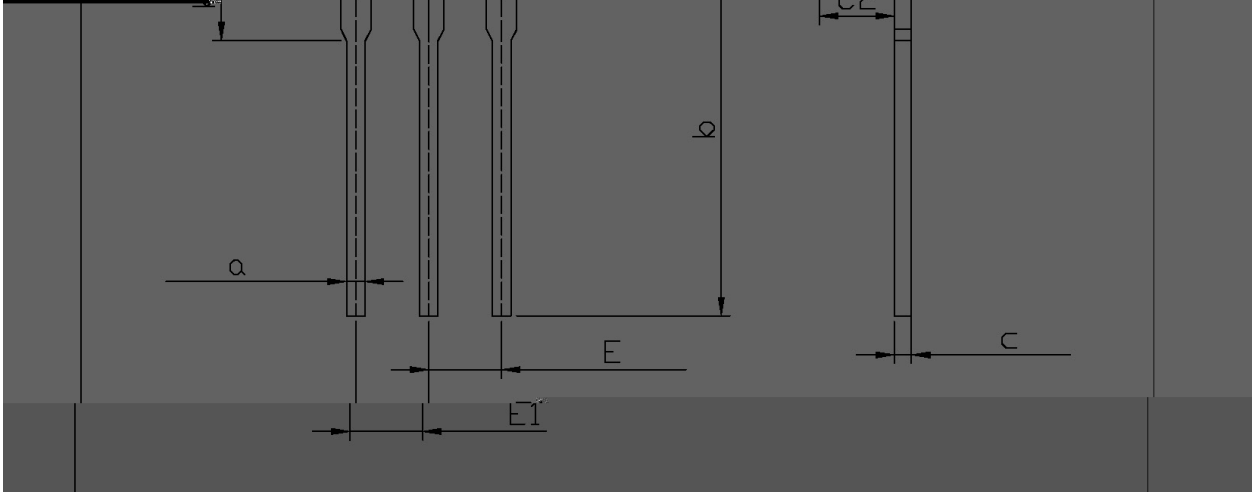
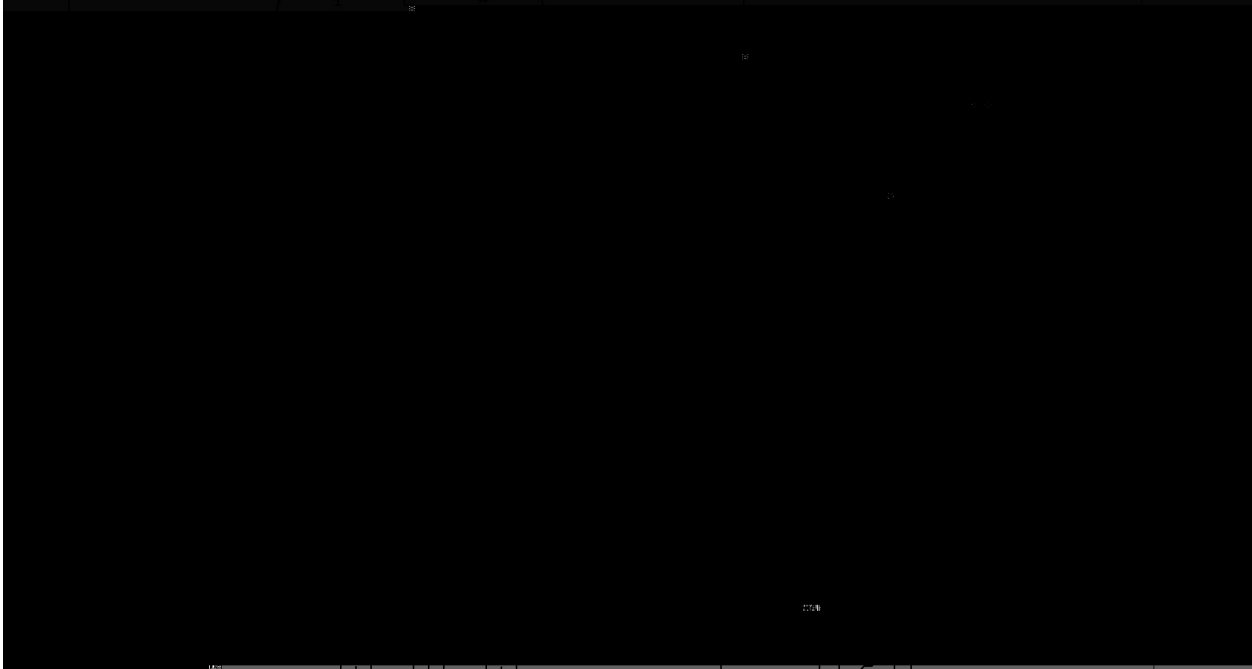
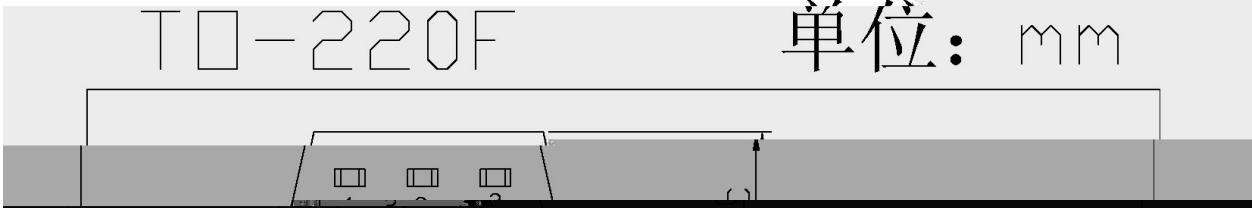
**/ Electrical Characteristics(Ta=25 )**

						μ
						μ

/ Electrical Characteristic Curve

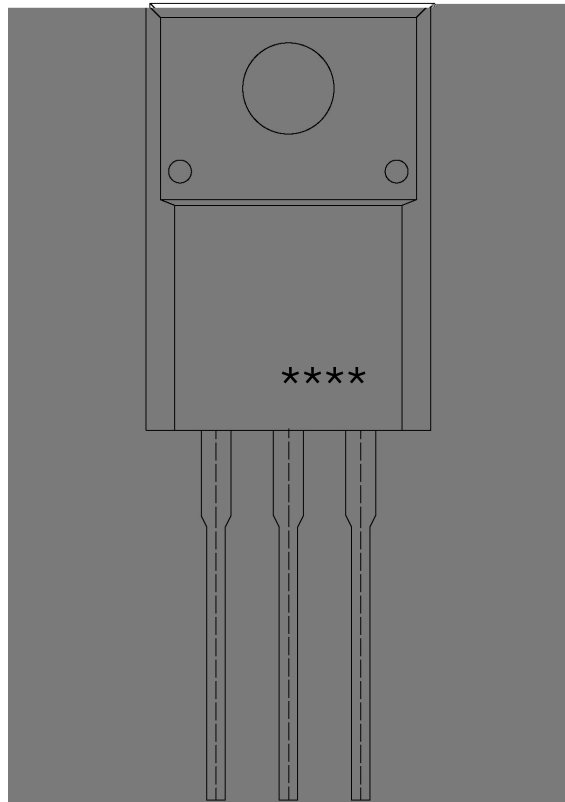


/ Package Dimensions



Symbol	Dimensions in Millimeters		Symbol	Dimensions in Millimeters	
	Min	Max		Min	Max
b1	4.3	4.7	b	2.9	3.9
a	9.7	10.3	a	0.5	0.75

/ Marking Instructions

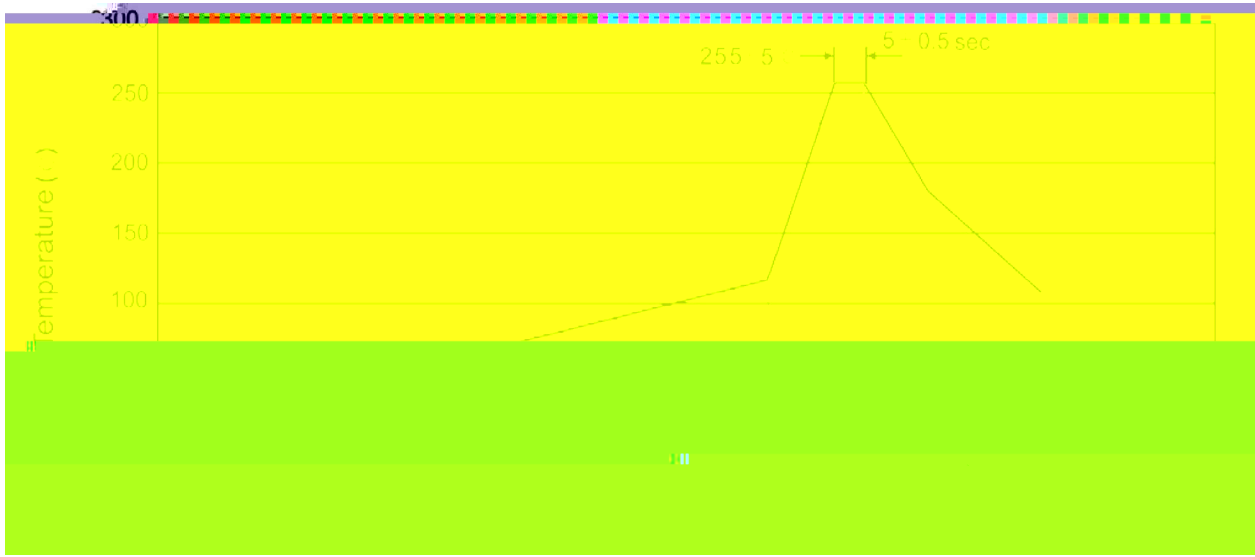


BR

TT2190

\*\*\*\*

( ) / Temperature Profile for Dip Soldering(Pb-Free)



± ± ± ±

/ Resistance to Soldering Heat Test Conditions

± ± °C

/ Packaging SPEC.

						Bag	Inner Box	Outer Box
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box			
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

						Tube	Inner Box	Outer Box
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box			
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices