

/ Descriptions

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

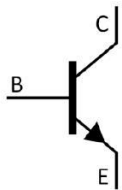
/ Features

High h_{FE} , low saturation voltage.

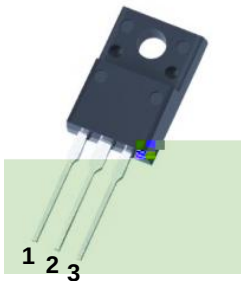
/ Applications

Switching application, interface circuit and driver circuit application.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

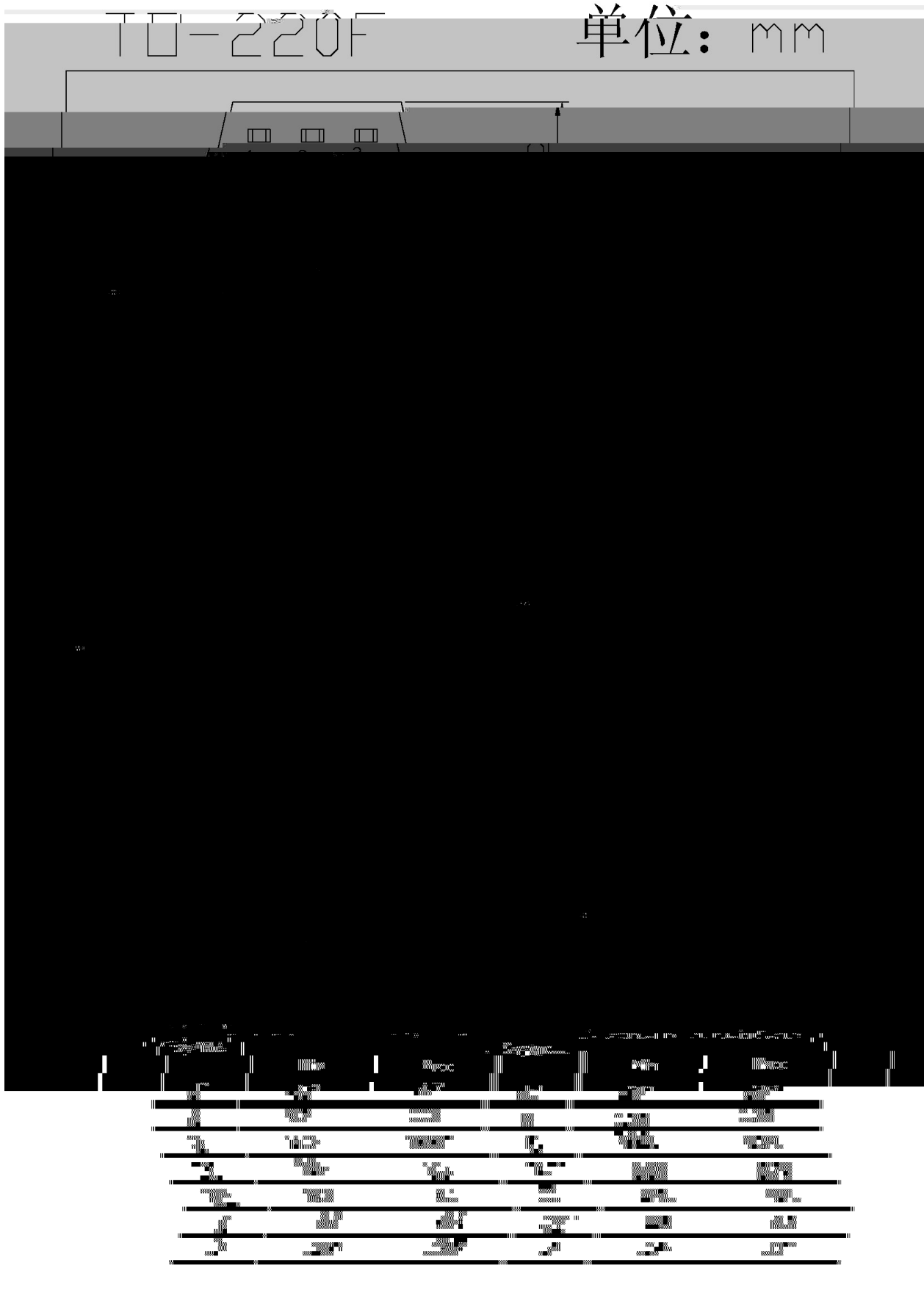
/ h_{FE} Classifications & Marking

See Marking Instructions.

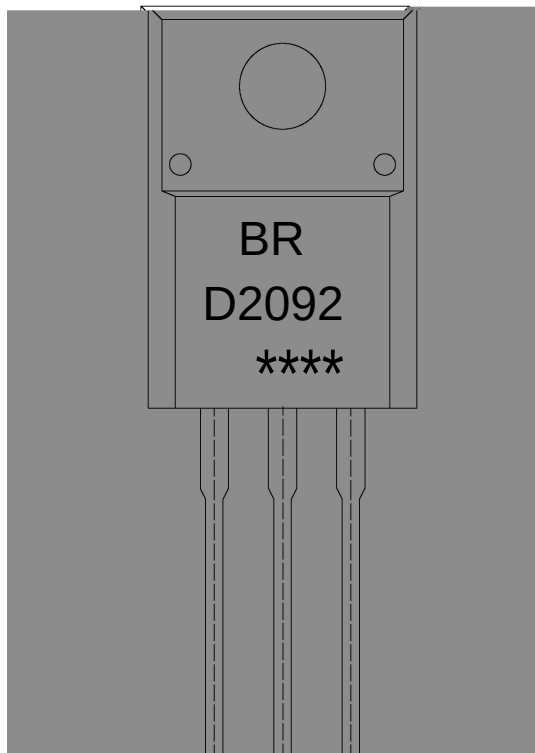
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	3.0	A
Collector Current - Continuous(Pulse)	I_{CP}	5.0	A
Base Current	I_B	1.0	A
Collector Power Dissipation	$P_C(T_c=25^\circ C)$	2.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_C=50mA$ $I_B=0$	80			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=80V$ $I_E=0$			10	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}				

/ Package Dimensions



/ Marking Instructions



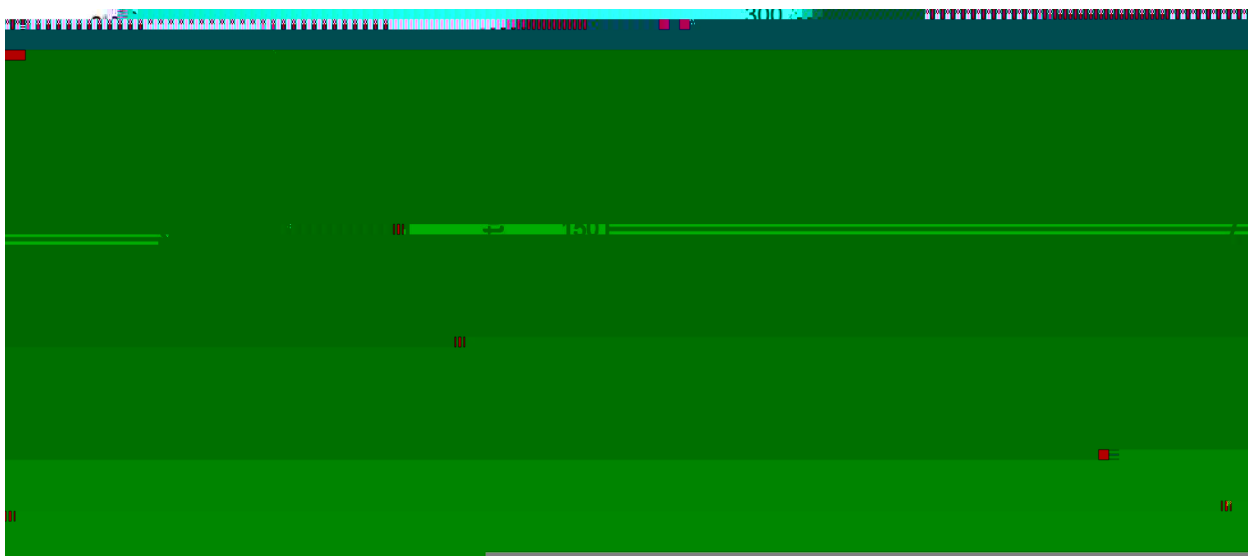
Note:

BR: Company Code.

D2092: 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	Units		Dimension	(unit mm3)
	Units/Bag	Bags/Inner Box		