

/ Descriptions

TO-220F Voltage Regulator in a TO-220F Plastic Package.

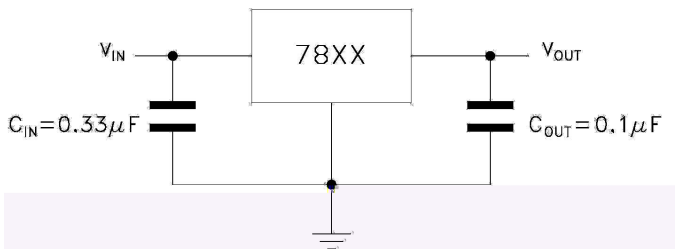
/ Features

1.5A,
3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting.

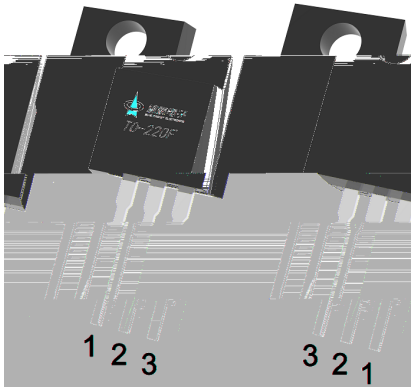
/ Applications

Voltage Regulator.

/ / Equivalent Circuit or Application Circuit



/ Pinning



PIN1 IN PIN 2 GND PIN 3 OUT

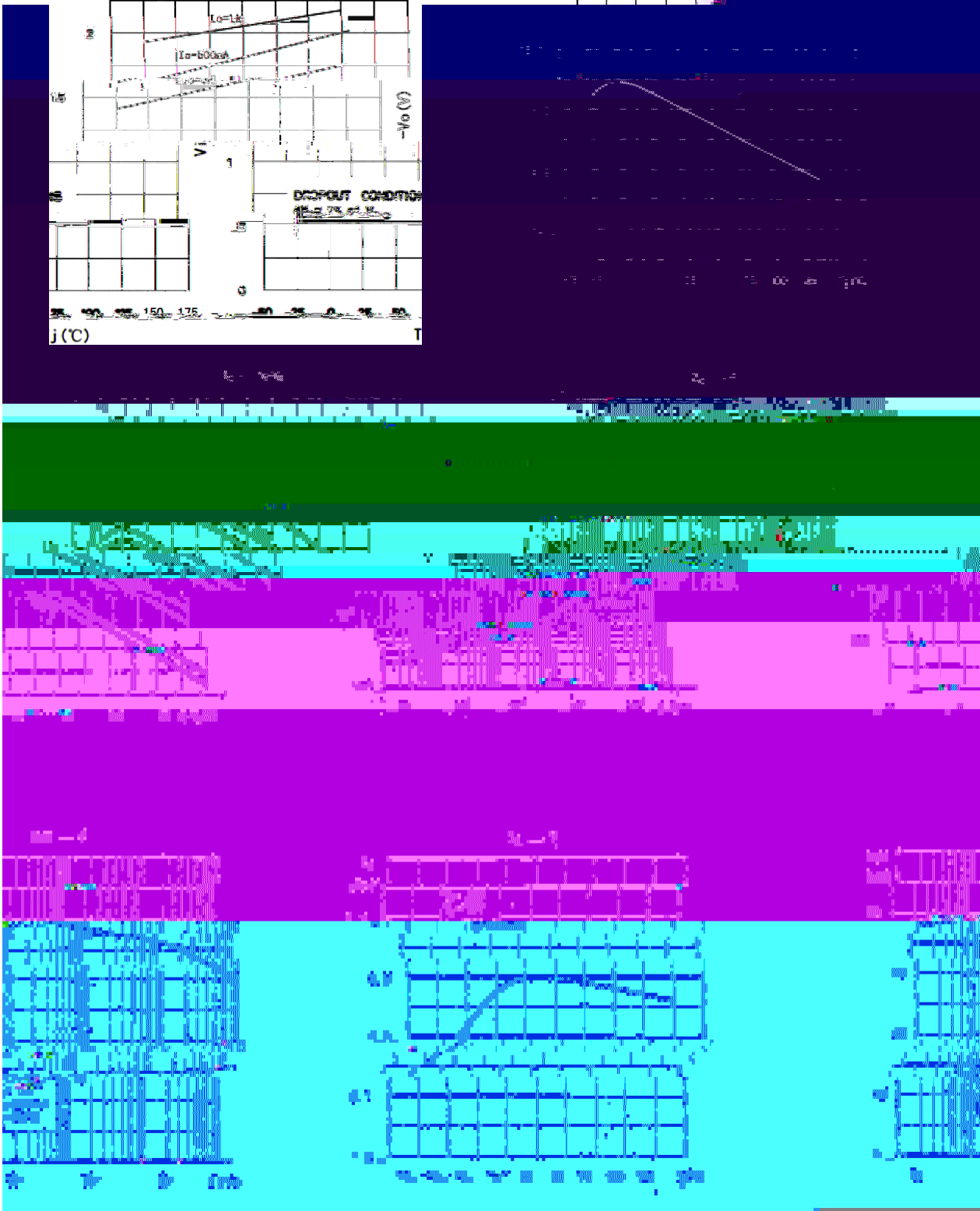
/ Marking

See Marking Instructions.

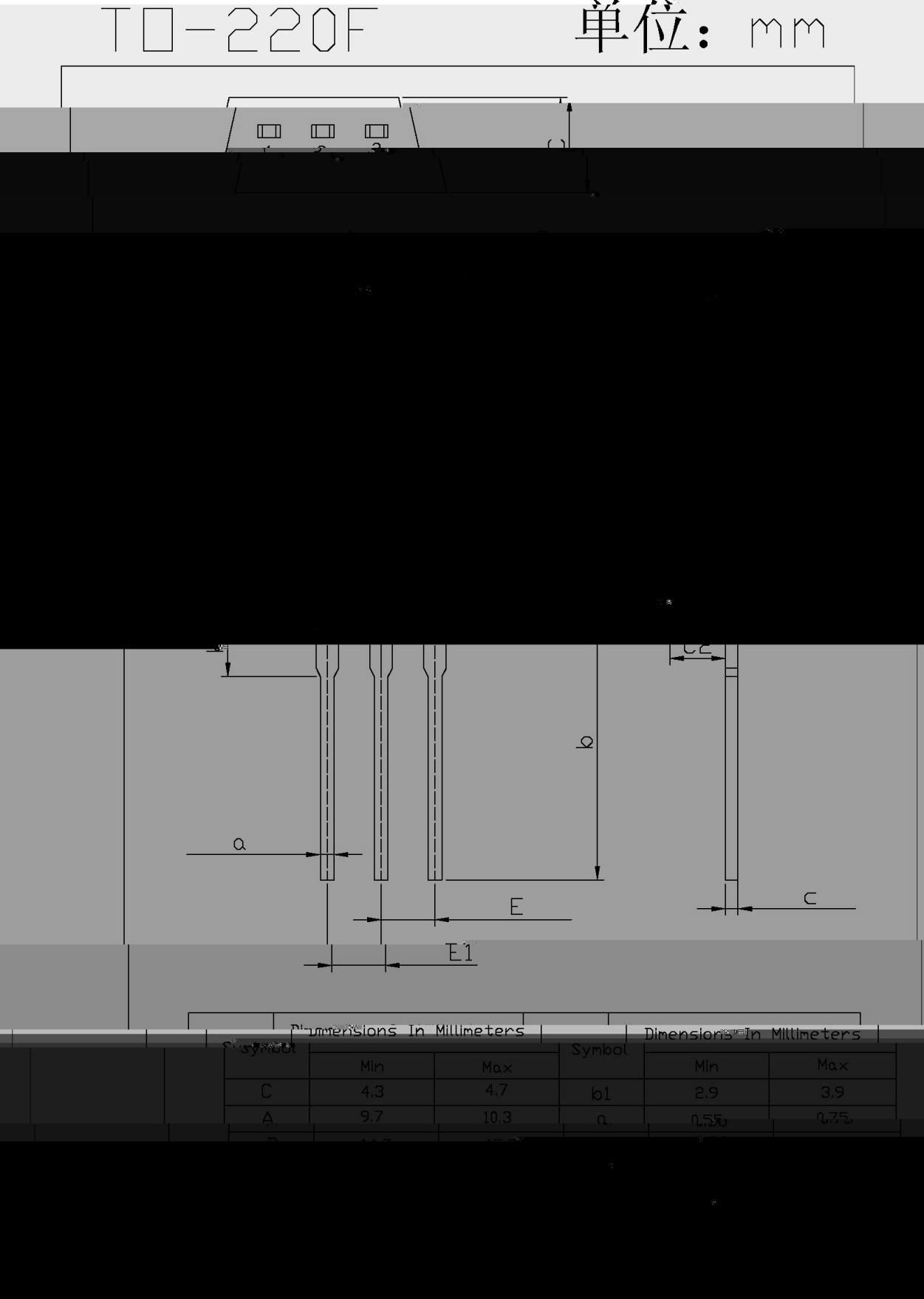
Parameter	Symbol	Rating	Unit
Input voltage	V_i	35	V
Thermal Resistance Junction-ambient	$R_{\theta JA}$	60	/W
Thermal Resistance Junction-case	$R_{\theta JC}$	5.0	/W
Operating Temperature Range	T_{OPR}	-40 125	
Storage temperature range	T_{stg}	-65 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_o	$T_j=25$	14.4	15	15.6	V
		$V_i=17.5V-30V$ $I_o=5.0mA-1.0A$ $PD \leq 15W$	14.25	15	15.75	V
Load Regulation	V_o	$T_j=25$ $I_o=5.0mA-1.5A$			300	mV
		$T_j=25$ $I_o=250mA-750mA$			150	mV
Line regulation	V_o	$T_j=25$ $V_i=17.5V-30V$			300	mV
		$T_j=25$ $V_i=20V-26V$			150	mV
Quiescent Current	I_q	$T_j=25$			8.0	mA
Quiescent Current Change	I_q	$V_i=17.5V-30V$			1.0	mA
		$I_o=5.0mA-1.0A$			0.5	mA
Output Voltage Drift	V_o / T	$I_o=5.0mA$		-1.0		mV/
Output Noise Voltage	eN	B=10Hz-100KHz $T_j=25$		90		$\mu V/V_o$
Supply Voltage Rejection	SVR	$V_i=18.5V-28.5V$ $f=120Hz$	54			dB
Dropout Voltage	V_d	$I_o=1A$ $T_j=25$		2.0		V
Output Resistance	R_o	$f=1.0KHz$		19		m Ω

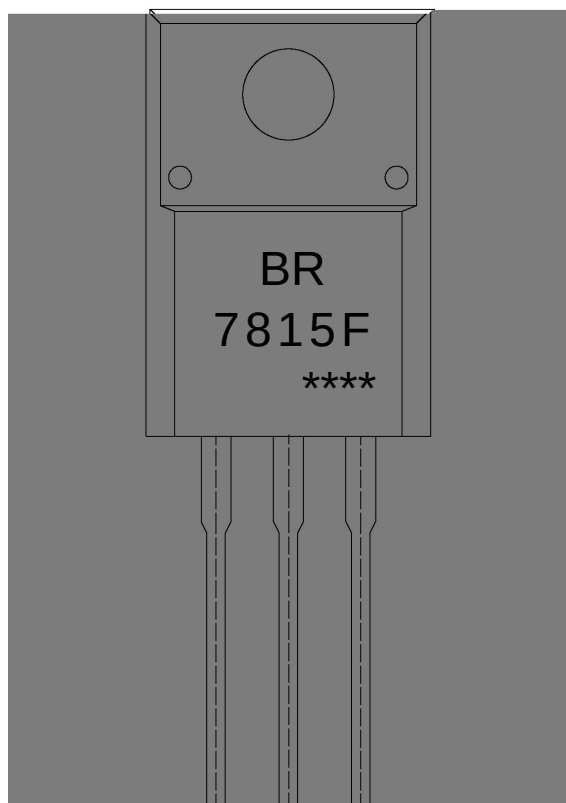
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

7815F

Note:

BR: Company Code

7815F: 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 /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	1ç	lø	0	TØ	T	