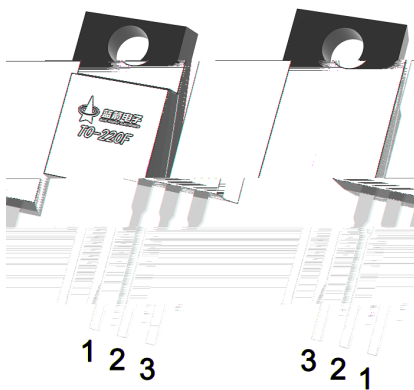


TO-220F Voltage Regulator in a TO-220F Plastic Package.

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

Voltage Regulator.

 $\pm$ / v $\pm$ / Equivalent Circuit or Application Circuit



PIN1

绝对最大额定值(Ta=25℃)

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

电 气 特 性 (Ta=25℃ Vi=10V, Io=500mA unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_O	$T_J=25^\circ\text{C}$	4.8	5.0	5.2	V
		$V_I=7V-20V$ $I_O=5mA-1A$ $P_O \leq 15W$	4.75	5.0	5.25	V
Load Regulation	V_O	$T_J=25^\circ\text{C}$ $I_O=5mA-1.5A$			100	mV
		$T_J=25^\circ\text{C}$ $I_O=250mA-750mA$			50	mV
Line regulation	V_O	$T_J=25^\circ\text{C}$ $V_I=7V-25V$		3.0	100	mV
		$T_J=25^\circ\text{C}$ $V_I=8V-12V$		1.0	50	mV
Quiescent Current	I_q	$T_J=25^\circ\text{C}$			8.0	mA
Quiescent Current Change	I_q	$V_I=7V-25V$			0.8	mA
		$I_O=5mA-1A$			0.5	mA
Output Voltage Drift	V_O / T	$I_O=5mA$		-1.1		mV/°C
Output Noise Voltage	eN	B=10Hz-100KHz $T_J=25^\circ\text{C}$			40	V/V _O
Supply Voltage Rejection	SVR	$V_I=8V-18V$ $f=120Hz$	62			dB
Dropout Voltage	V_d	$I_O=1A$ $T_J=25^\circ\text{C}$		2.0		V
Output Resistance	R_O	$f=1KHz$		17		mΩ
Short Circuit Current	I_{sc}	$V_I=35V$ $T_J=25^\circ\text{C}$		0.75		A
Short Circuit Peak Current	I_{scp}	$T_J=25^\circ\text{C}$		2.2		A

7805F

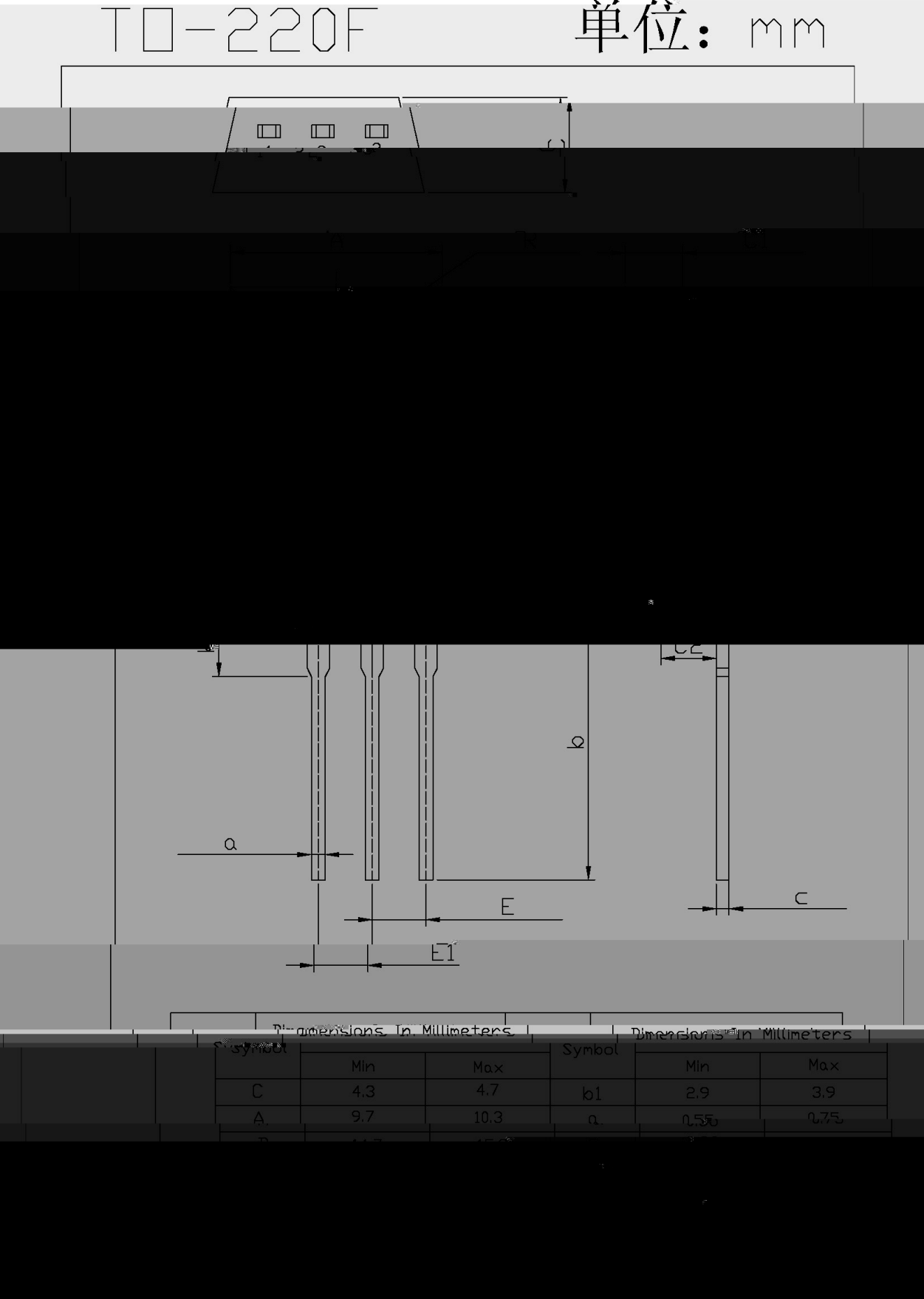
Rev.G Jun.-2024



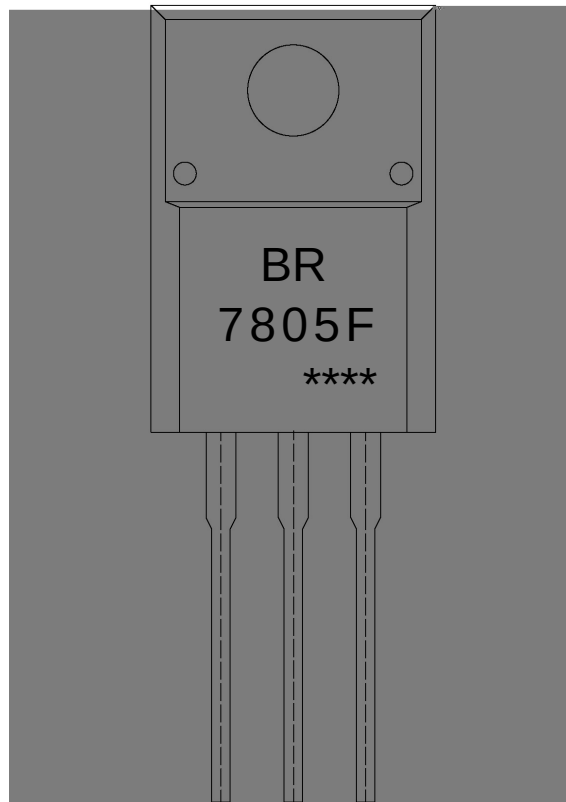
蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

/ Package Dimensions



/ **Marking Instructions**



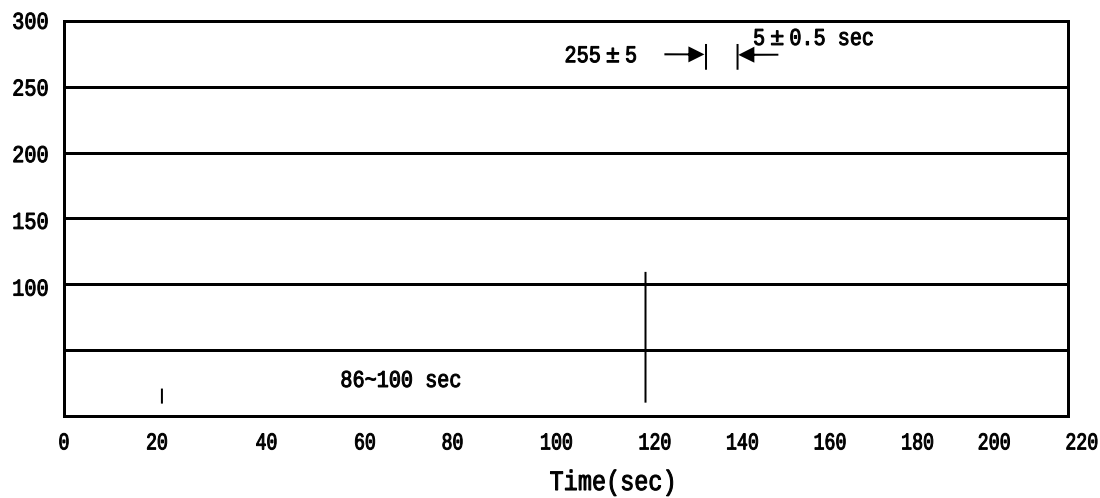
Note:

BR: Company Code

7805F: 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 mm ³)		
	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 mm ³)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

¶ / Notices