

描述 / Descriptions

TO-220 塑封封装电压调整器。
Voltage Regulator in a TO-220 Plastic Package.

特征 / Features

三端稳压调整器，输出电流高达 1.5A,内设过热保护和短路限制，符合 AEC-Q100 标准高可靠性要求，无卤产品。

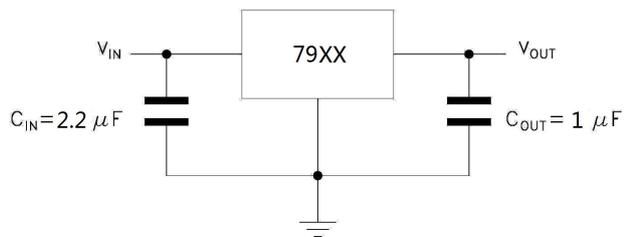
3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting, Qualified to AEC-Q100 Standards for High Reliability, HF Product.

用途 / Applications

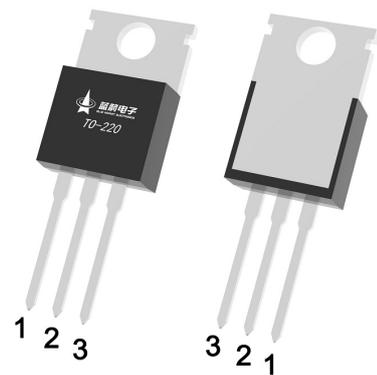
电压调整器，满足汽车应用的严格要求。

Voltage Regulator, Meet the stringent requirements of automotive applications.

内部等效电路/应用电路 / Equivalent Circuit or Application Circuit



引脚排列 / Pinning



PIN1 : GND

PIN 2 : IN

PIN 3 : OUT

印章代码 / Marking

见印章说明。

See Marking Instructions.

极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Input voltage	V _I	-35	V
Thermal Resistance Junction-Ambient	R _{θJA}	62.5	°C/W
Thermal Resistance Junction-Case	R _{θJC}	5	°C/W
Operating Junction Temperature Range	T _{OPR}	-40~125	°C
Storage temperature range	T _{stg}	-65~150	°C

电性能参数 / Electrical Characteristics

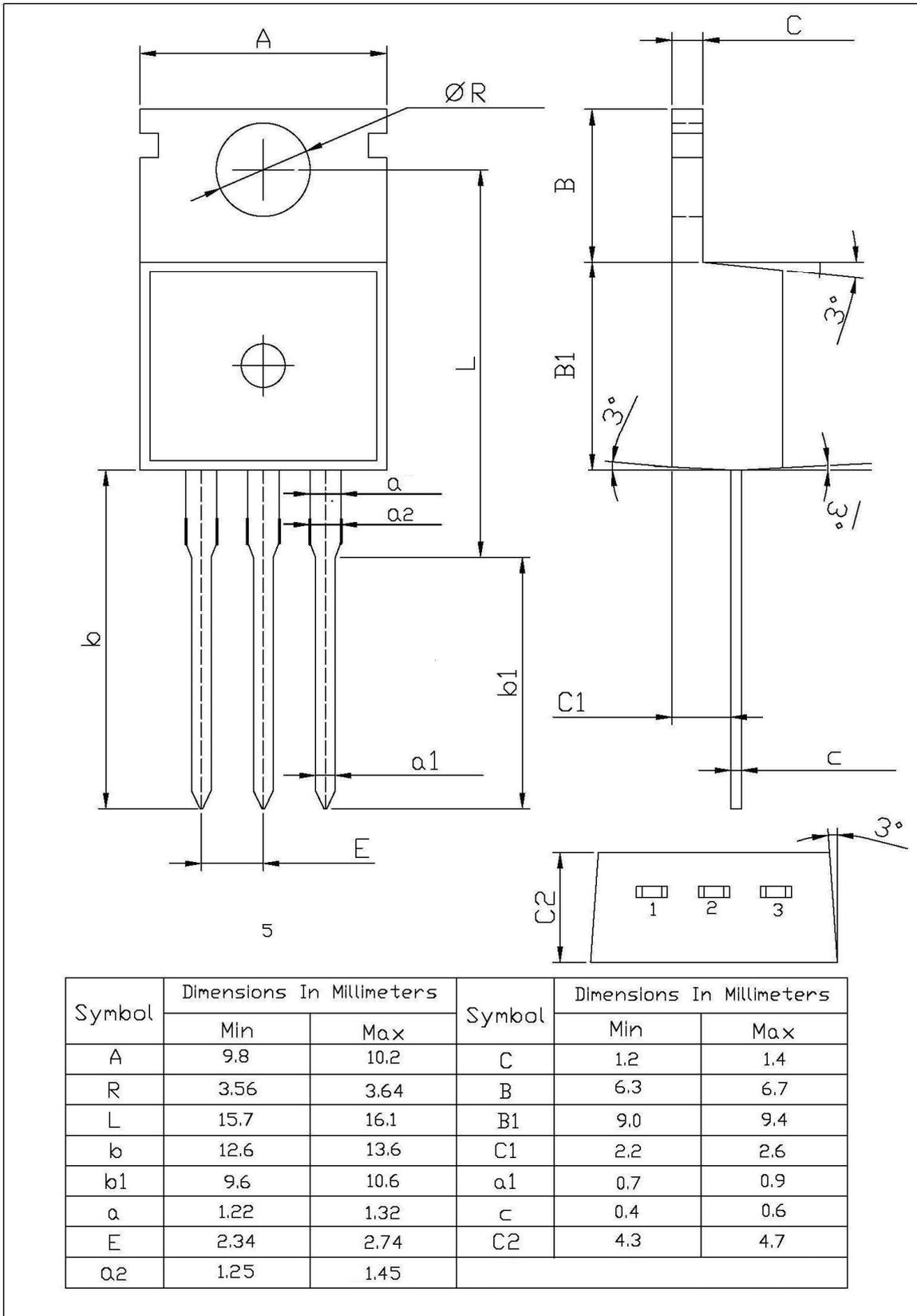
(Ta=25°C , Vi=-23V,Io=500mA , Ci=2.2μF, Co=1μF, unless otherwise specified)

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Output voltage	V _O	T _J =25°C	-14.4	-15.0	-15.6	V
		I _o =5mA~1A P _o ≤15W V _i =-17V~-30V	-14.25	-15.0	-15.75	V
Load Regulation	ΔV _O	T _J =25°C I _o =5.0mA~1.5A			300	mV
		T _J =25°C I _o =250mA~750mA			150	mV
Line regulation	ΔV _O	T _J =25°C V _i =-17.5V~-30V			300	mV
		T _J =25°C V _i =-20V~-26V			150	mV
Quiescent Current	I _q	T _J =25°C			6.0	mA
Quiescent Current Change	ΔI _q	V _i =-17.5V~-30V			1.0	mA
		I _o =5mA~1A			0.5	mA
Output Voltage Drift	ΔV _O /ΔT	I _o =5mA		1.5		mV/°C
Output Noise Voltage	V _N	B=10Hz~100KHz T _J =25°C		250		μV
Supply Voltage Rejection	SVR	ΔV _i =10V f=120Hz	54			dB
Dropout Voltage	V _d	I _o =1A T _J =25°C		2.0		V
Short Circuit Current	I _{sc}	V _i =-35V T _J =25°C		10		mA
Short Circuit Peak Current	I _{scp}	T _J =25°C		2.1		A

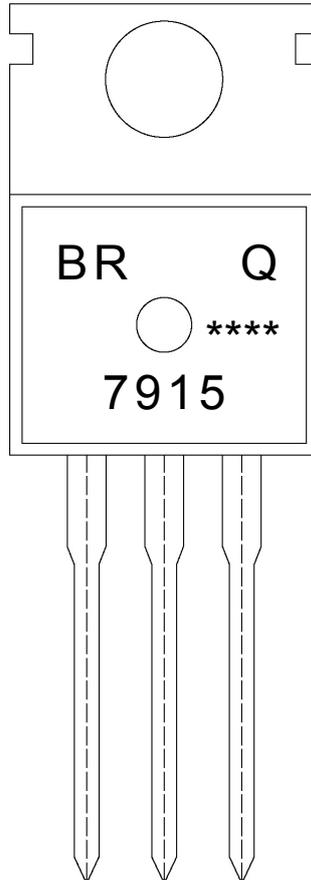
外形尺寸图 / Package Dimensions

T□-220

单位: mm



印章说明 / Marking Instructions



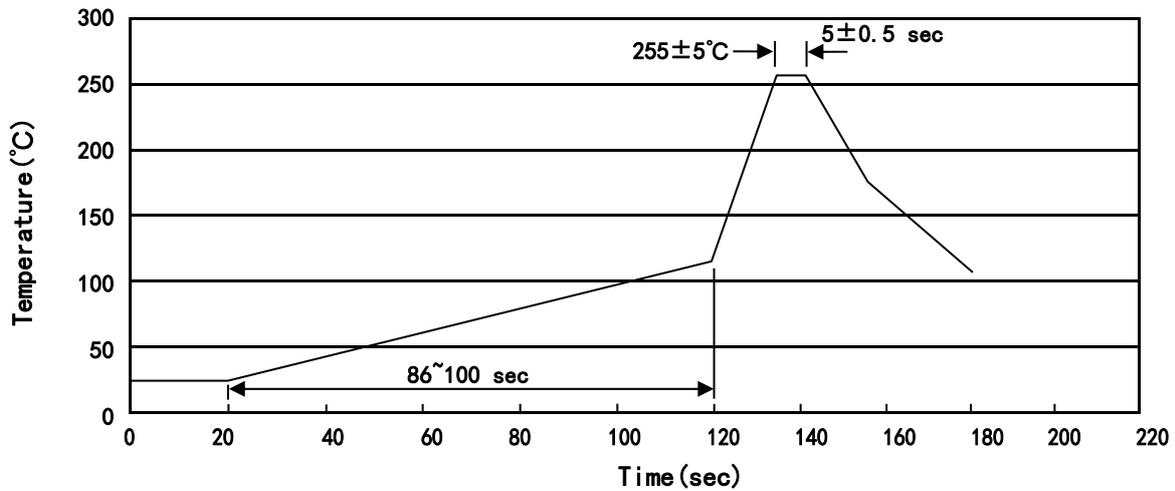
说明：

BR： 为公司代码
Q： 为汽车无卤产品标识
7915： 为产品型号
****： 为生产批号代码，随生产批号变化

Note:

BR: Company Code
Q: Automobile halogen-free product Code
7915: Product Type
****: Lot No. Code, code change with Lot No

波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)



说明：

- 1、预热温度 25~150°C，时间 60~90sec;
- 2、峰值温度 255±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:255±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：270±5°C 时间：10±1 sec. Temp.:270±5°C Time:10±1 sec

包装规格 / Packaging SPEC.

散件包装 / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

套管包装 / TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

使用说明 / Notices