

/ Revised record

[illegible]

/ Descriptions

TO-92

Precision adjustable shunt regulator in a TO-92 Plastic Package.

/ Features

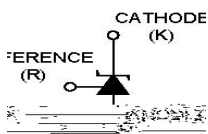
2.500V; 0.4%,0.8%; 1.0mA 100mA; ;
 $V_O = V_{ref}$ 37V; (:400 μ A); (:0.15 Ω)

Precise reference voltage to 2.500V;guaranteed 0.4%,0.8% reference voltage Tolerance; sink current capability,1.0mA~100mA;quick turn-on; adjustable Output voltage, $V_O = V_{ref} \sim 37V$;low operational cathode current,400 μ A typical; 0.15 Ω typical output impedance.

/ Applications

Linear regulators, adjustable power supply, switching power supply.

/ Equivalent Circuit



/ Pinning



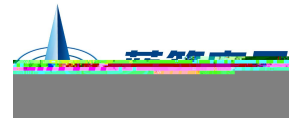
1 2 3
 PIN1 K PIN 2 A PIN 3 R

/ Marking

See Marking Instructions

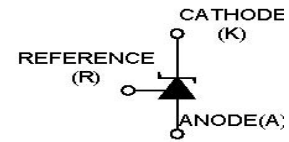
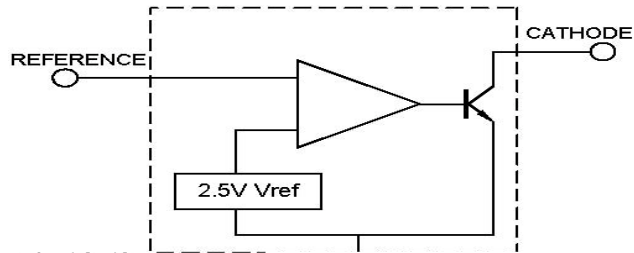
BR431

Rev.E Jan.-2022

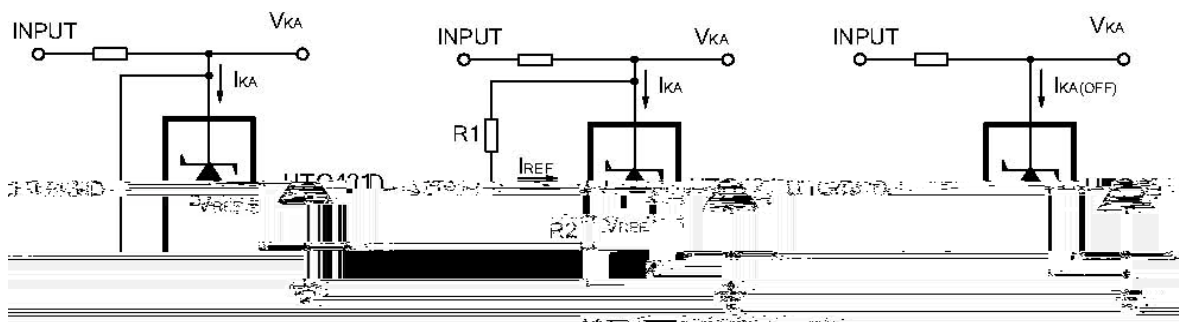


& Test circuits&Typical Application

BLOCK DIAGRAM:



TEST CIRCUITS:

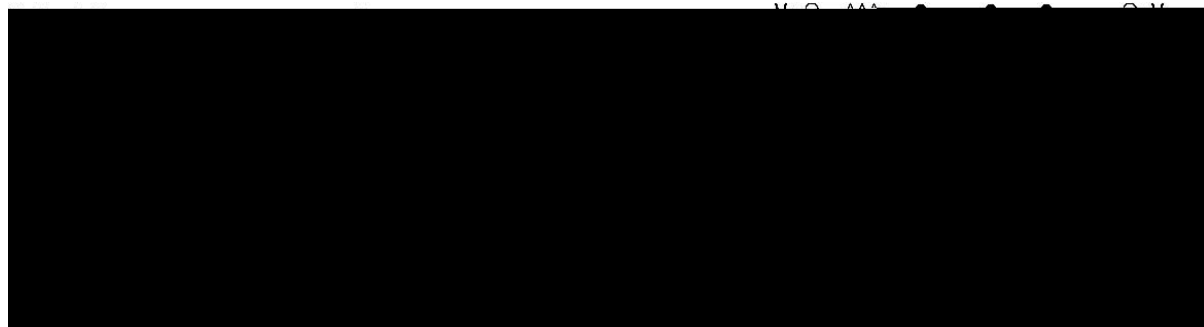


Test Circuit For $V_{KA}=V_{REF}$

Test Circuit for $V_{KA} \geq V_{REF}$

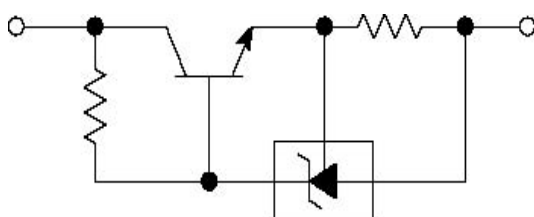
Test Circuit For $I_{KA}(\text{OFF})$

TYPICAL APPLICATION:

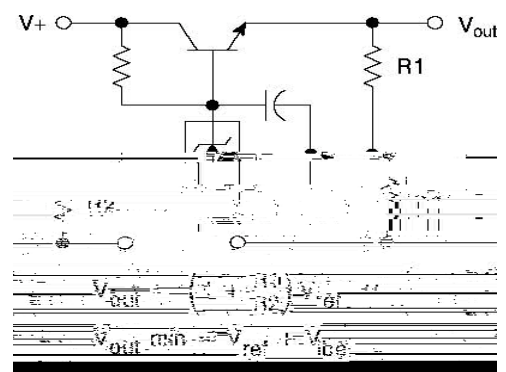


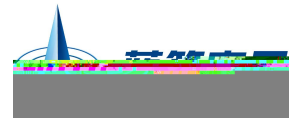
Shutdown Regulator

Higher-current Shunt

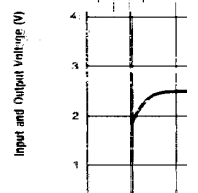
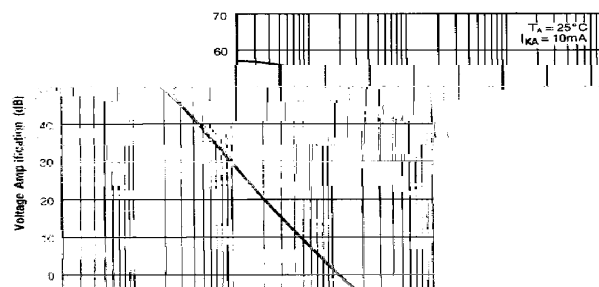
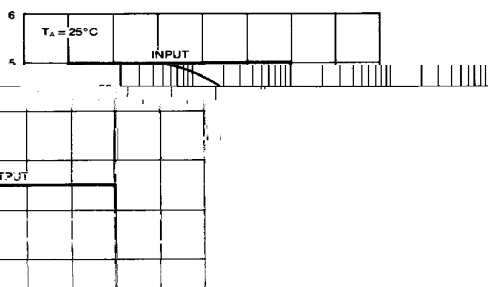
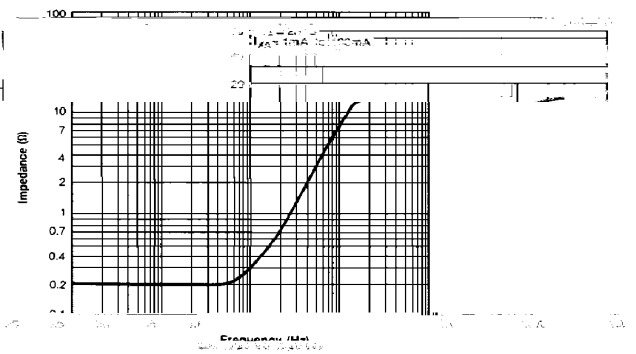
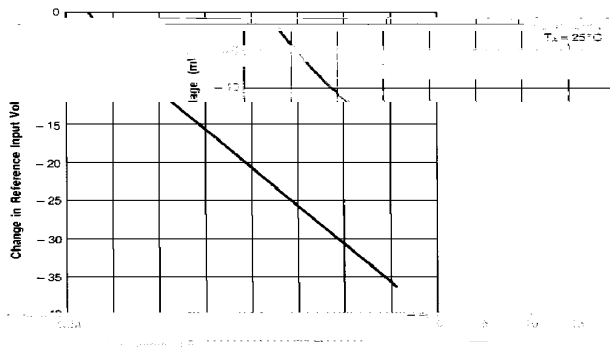
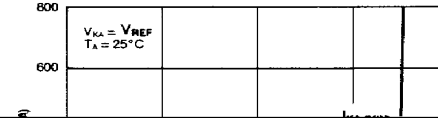
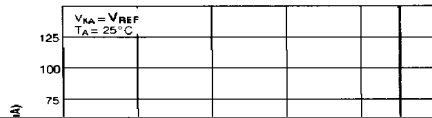


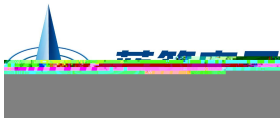
Constant Current Source



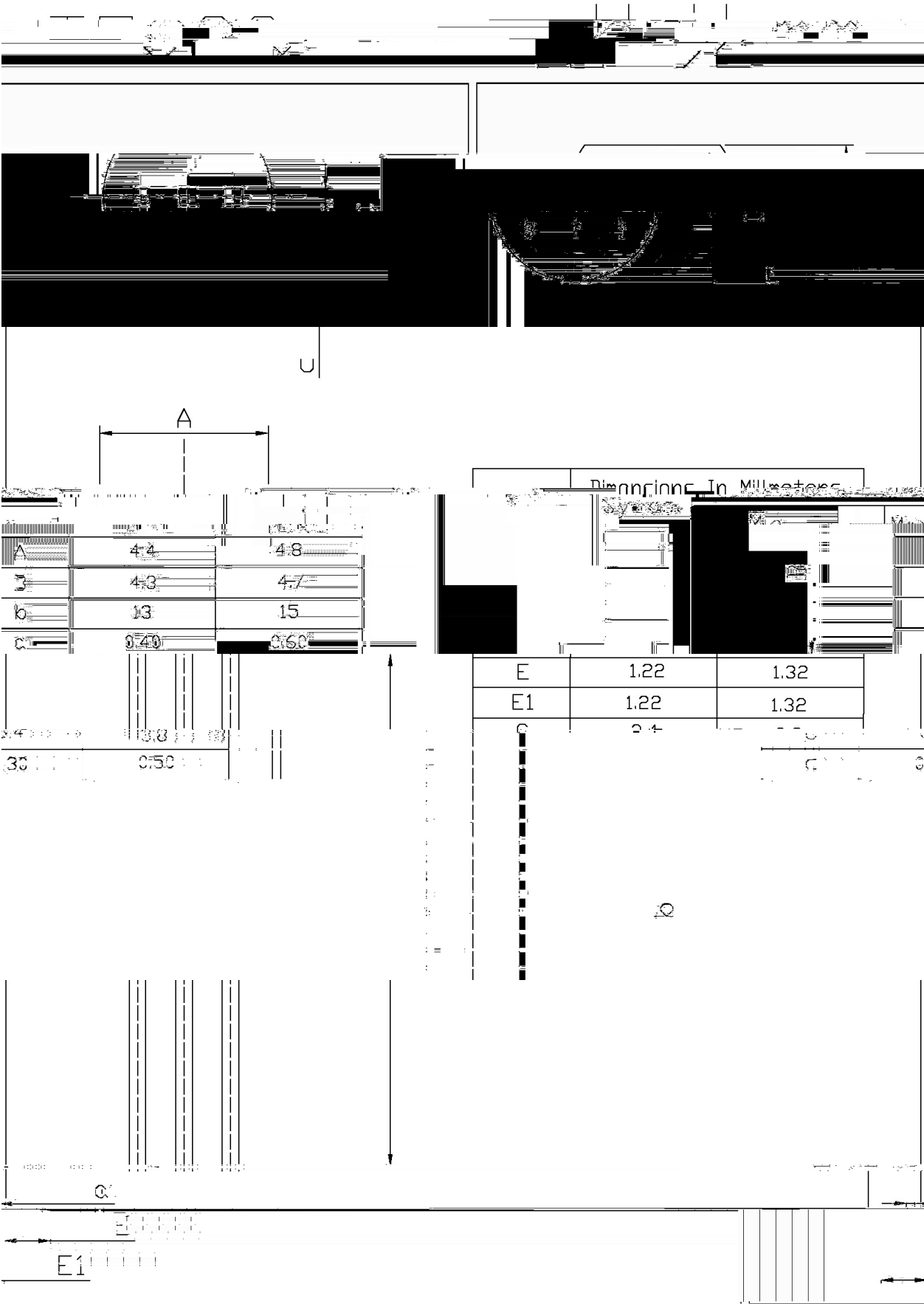


/ Electrical Characteristic Curve

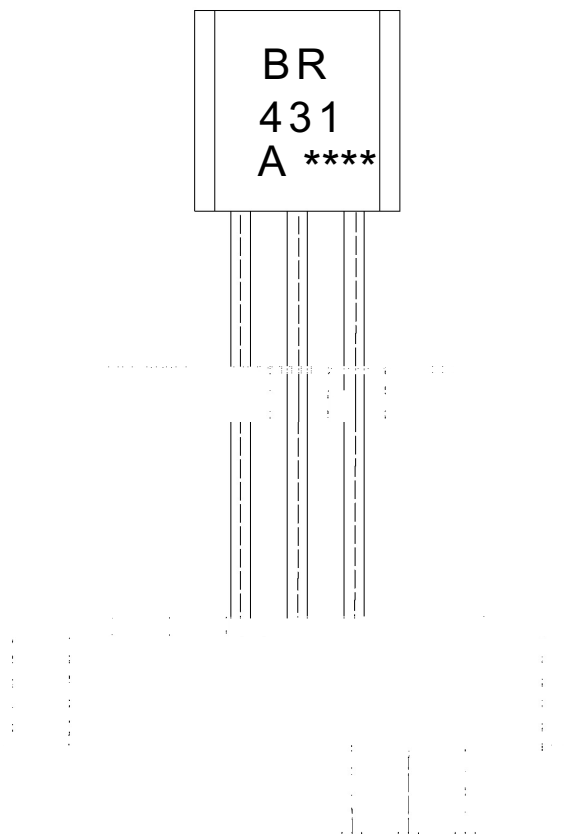




/ Package Dimensions



/ Marking Instructions



说明：

BR： 为公司代码

431： 为型号代码

A： 为 V_{REF} 分档代码

****： 为生产批号代码，随生产批号变化

Note:

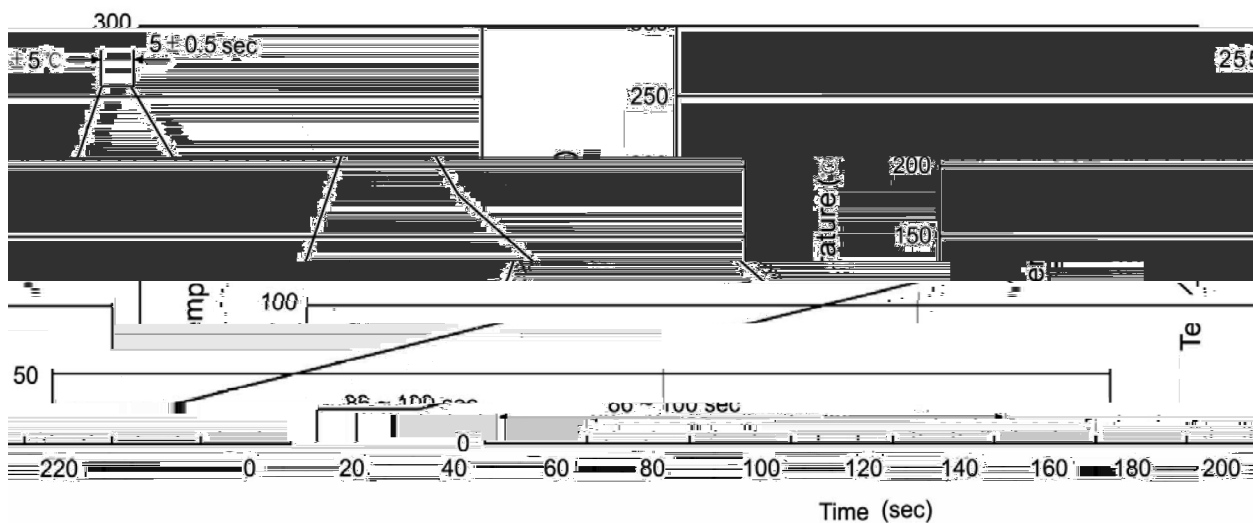
BR: Company Code.

431: Product Type Code.

A: V_{REF} Classifications Symbol

****: 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°C, Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | | 2.Peak Temp.:255±5°C, Duration:5±0.5sec. |
| 3 | | 2 | 10°C/sec. | | 3. Cooling Speed: 2~10°C/sec. |

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	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-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

/ AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	Units/tape 只/纸带	Tape/Inner Box 纸带/盒	Rows/Inner Box 纸带层/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Inner Box 盒	Outer Box 箱
TO-92	3,000	1	120				