

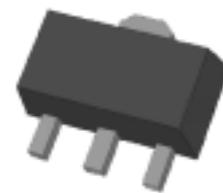


## THREE TERMINAL NEGATIVE VOLTAGE REGULATORS -20V FH79L20

### -20V 三端稳压器 SOT-89

#### FEATURES

- Best Suited to Power Supply for TTL, C<sup>2</sup>-MOS
- Built-in Overcurrent Protective Circuit
- Built-in Thermal Protective Circuit
- Max. Output Current 150mA ( $T_j=25^\circ\text{C}$ )
- SOT-89 Packaged in Power Mini .



1.Gnd 2.Vin 3.Vout

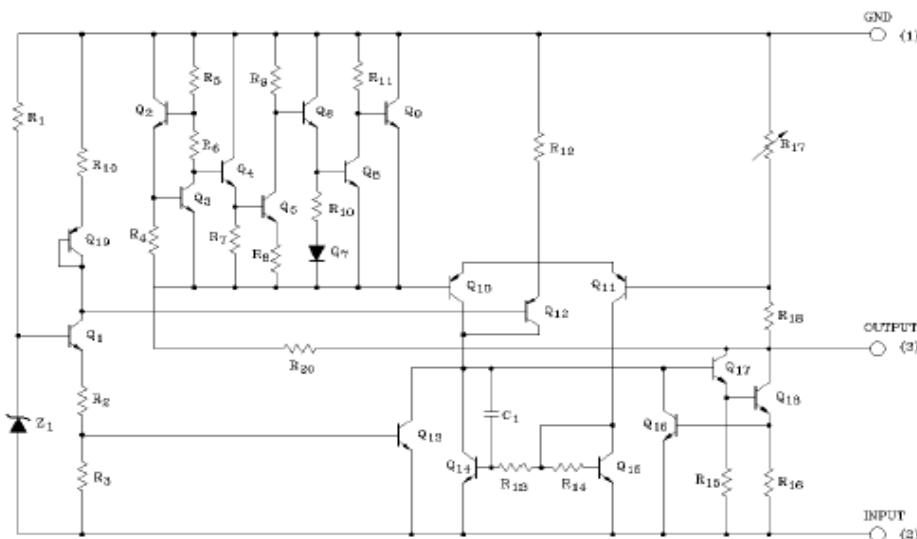
| Characteristic                                  |           | Symbol           | Rating     | Unit |
|---|-----------|------------------|------------|------|
| Input Voltage                                   | (5V~15V)  | V <sub>lin</sub> | - 35       | V    |
|   | (18V~24V) |                  | - 40       |      |
| Power Dissipation<br>( $T_c=25^\circ\text{C}$ ) |           | PD               | 500        | mW   |
| Operating Junction<br>Temperature               |           | T <sub>j</sub>   | - 30 ~ 150 |      |
| Operating Temperature                           |           | T <sub>opr</sub> | - 30 ~ 75  |      |
| Storage Temperature                             |           | T <sub>stg</sub> | - 55 ~ 75  |      |

#### DEVICE MARKING 打标

FH79L20 = 9I

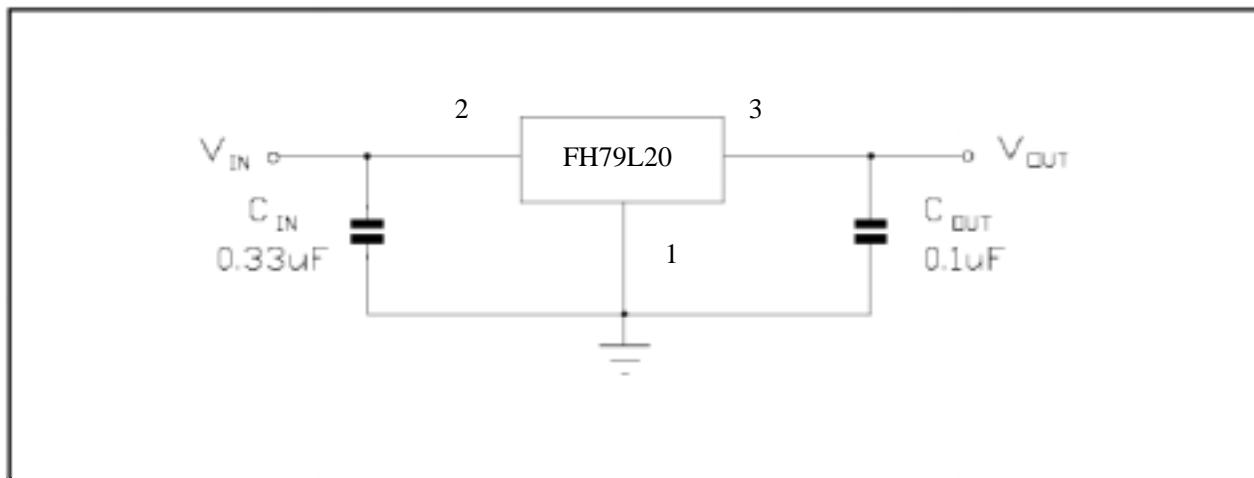
#### EQUIVALENT CIRCUIT

#### 等效电路图





## TEST CIRCUITS



## ELECTRICAL CHARACTERISTICS

### FH79L20

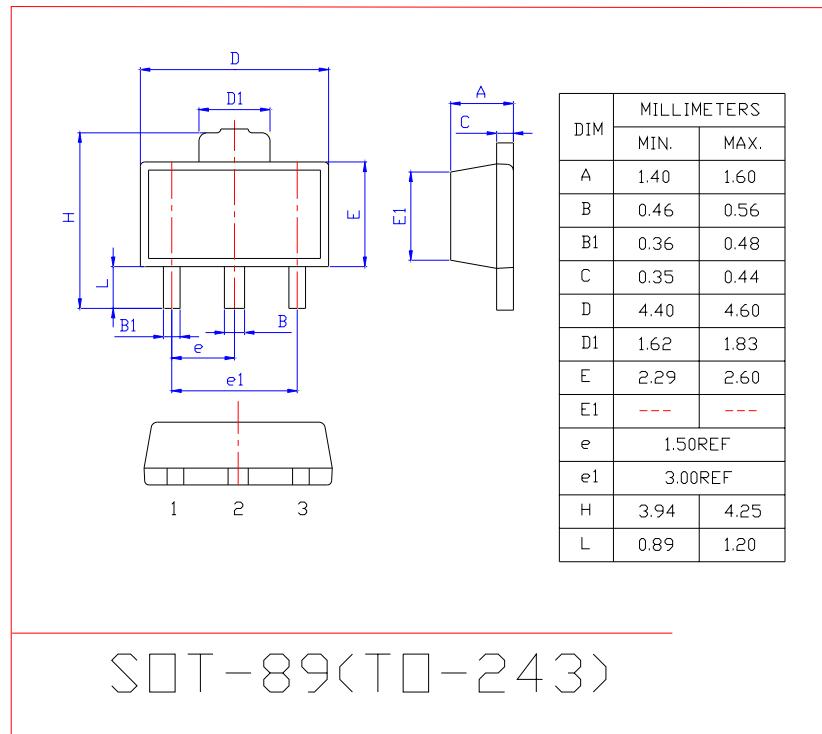
Unless otherwise specified ,Vin=-29V, Iout=40mA, Cin=0.33uF, Cout=0.1uF , Tj=0 to125

| CHARACTERISTIC                                    | SYMBOL          | TEST CONDITION                      |                  | MIN.  | TYP.  | MAX.  | UNIT        |
|---|-----------------|-------------------------------------|------------------|-------|-------|-------|-------------|
| Output Voltage                                    | Vout            | Tj=25                               |                  | -20.8 | -20.0 | -19.2 | V           |
| Input Regulation                                  | Reg line        | Tj=25                               | -35V≤Vin≤-23.5V, | -     | 33    | 330   | mV          |
|   |                 |                                     | -35V≤Vin≤-24V,   | -     | 28    | 285   |             |
| Load Regulation                                   | Reg load        | Tj=25                               | 1.0mA≤Iout≤100mA | -     | 33    | 180   | mV          |
|   |                 |                                     | 1.0mA≤Iout≤40mA  | -     | 17    | 90    |             |
| Output Voltage                                    | Vout            | -35V≤Vin≤-23.5V,<br>1.0mA≤Iout≤40mA |                  | -21.0 | -     | -19.0 | V           |
|   |                 | Vin=-29V, 1.0mA≤Iout≤70mA           |                  | -21.0 | -     | -19.0 |             |
| Quiescent Current                                 | IQ              | Tj=25                               |                  | -     | 3.3   | 6.5   | mA          |
|   |                 | Tj=125                              |                  | -     | -     | 6.0   |             |
| Quiescent Current Change                          | IQ              | -35V≤Vin≤-24V,                      |                  | -     | -     | 1.5   | mA          |
|   |                 | 1.0mA≤Iout≤40mA                     |                  | -     | -     | 0.1   |             |
| Output Noise Voltage                              | V <sub>NO</sub> | Ta=25 , 10Hz ≤f≤100kHz              |                  | -     | 170   | -     | uVrms       |
| Long Term Stability                               | Vout/ t         |                                     |                  | -     | 49    | -     | mV/1.0 kHrs |
| Ripple Rejection Ratio                            | RR              | F=120Hz,<br>-35V≤Vin≤-27V,<br>Tj=25 |                  | 31    | 37    | -     | dB          |
| Dropout Voltage                                   | Vin-Vout        | Tj=25 , Iout=40mA                   |                  |       | 1.7   |       | V           |
| Average Temperature Coefficient of Output Voltage | TCvo            | Iout=5mA                            |                  | -     | -1.7  | -     | mV/         |



南京南山一风华高科直接授权代理  
025-84712762 84712745 52188228  
<http://www.nscn.com.cn>

## SOT-89 封装外形尺寸 (SOT-89 DIMENSION)



## 编带包装规格 (SOT-89 TAPE AND REEL SPECIFICATION AND PACKING SPECIFICATION)

