

## VS6206 Series

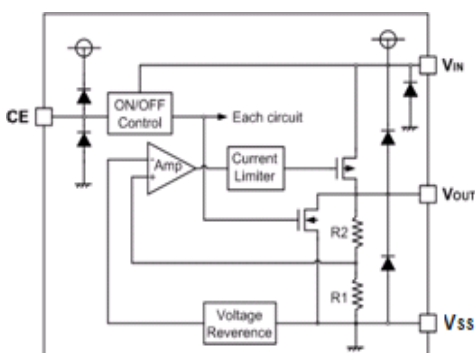
### ■ INTRODUCTION

The VS6206 series are a group of positive voltage regulators manufactured by CMOS technologies with high ripple rejection, low power consumption and low dropout voltage, which can prolong battery life in portable electronics. The VS6206 series work with low-ESR ceramic capacitors, reducing the amount of board space necessary for power applications. The VS6206 series consume less than 0.1uA in shutdown mode and have fast turn-on time less than 50us. The series are very suitable for the battery-powered equipments, such as RF applications and other systems requiring a quiet voltage source.

### ■ APPLICATIONS

- Cellular and Smart Phones
- Laptop, Palmtops and PDA
- Digital Still and Video Cameras

### ■ BLOCK DIAGRAM



### ■ FEATURES

- Low Dropout Voltage: 150mV@150mA
- Low Quiescent Current: 5μA
- High Ripple Rejection: 65dB@1kHz
- Excellent Line and Load Transient Response
- Operating Voltage: 2.0V~7.0V
- Output Voltage: 1.2 ~ 5.0V
- High Accuracy: ±2% (Typ.)
- Built-in Current Limiter, Short-Circuit Protection
- TTL- Logic-Controlled Shutdown Input

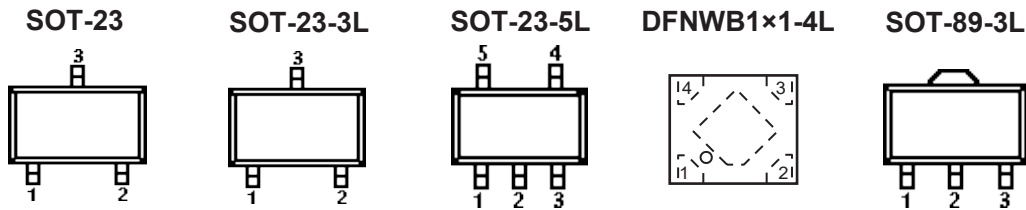
- MP3, MP4 Player
- Radio control systems
- Battery-Powered Equipment

### ■ ORDER INFORMATION

#### VS6206 ①②③④

| DESIGNATOR | SYMBOL  | DESCRIPTION                          |
|------------|---------|--------------------------------------|
| ①          | A       | Standard                             |
|            | B       | With Shutdown Function               |
| ②③         | Integer | Output Voltage<br>e.g. 1.8V=②:1, ③:8 |
| ④          | N       | Package:SOT-23                       |
|            | M       | Package:SOT-23-3L/5L                 |
|            | P/PT    | Package:SOT-89-3L                    |
|            | F       | Package: DFNWB1x1-4L                 |

(Top view)



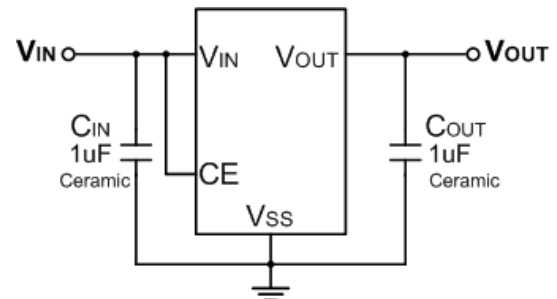
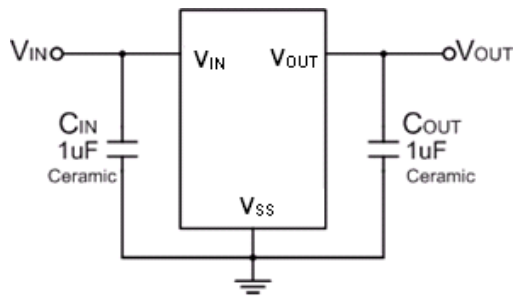
| PIN NUMBER |           |           |    | PIN NAME         | FUNCTION    |
|------------|-----------|-----------|----|------------------|-------------|
| SOT-23     | SOT-23-3L | SOT-89-3L |    |                  |             |
| N          | M         | P         | PT |                  |             |
| 1          | 1         | 1         | 2  | V <sub>SS</sub>  | Ground      |
| 2          | 2         | 3         | 1  | V <sub>OUT</sub> | Output      |
| 3          | 3         | 2         | 3  | V <sub>IN</sub>  | Power input |

#### SOT-23-5L

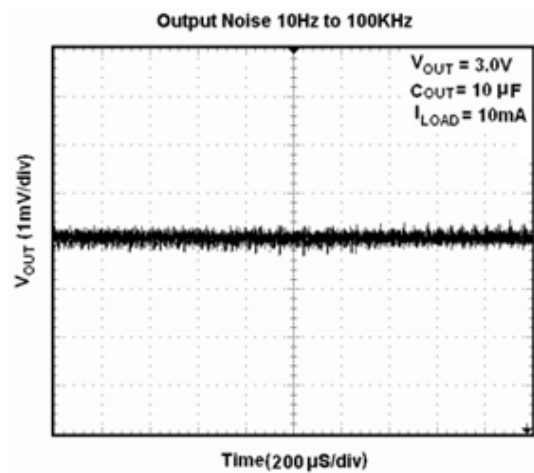
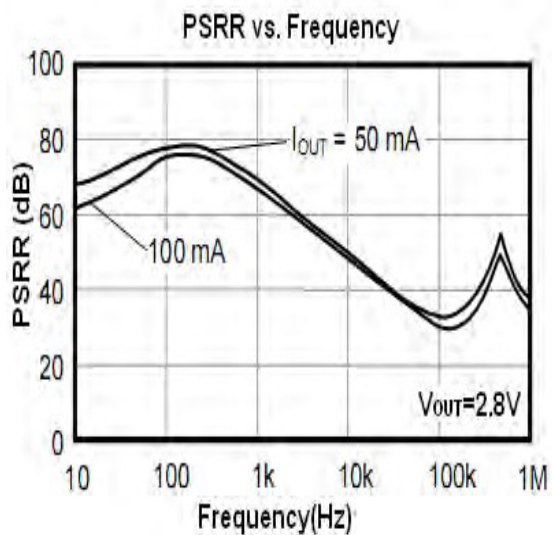
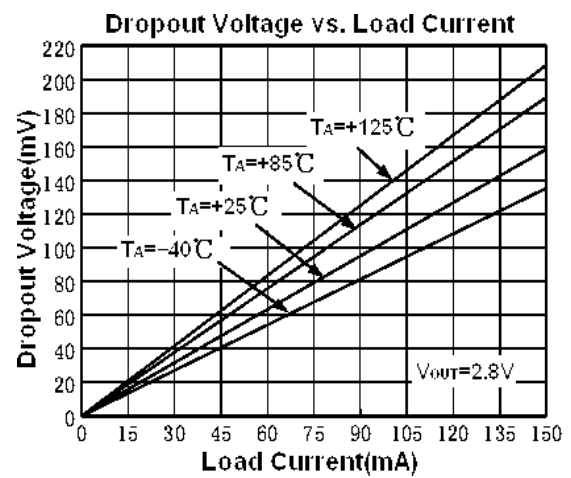
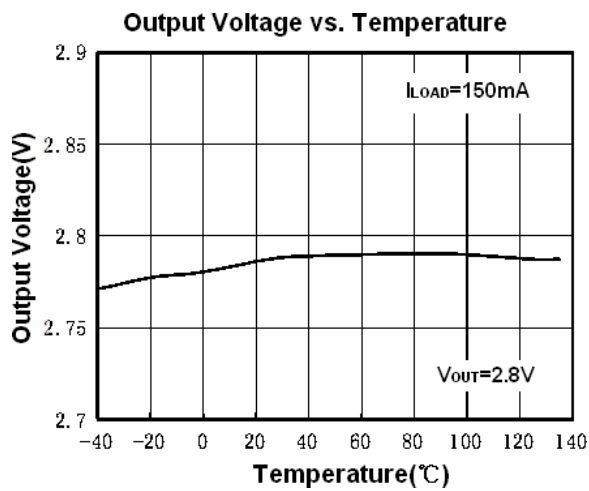
| PIN NUMBER | SYMBOL    | FUNCTION        |
|------------|-----------|-----------------|
| 1          | $V_{IN}$  | Power Input Pin |
| 2          | $V_{SS}$  | Ground          |
| 3          | CE        | Chip Enable Pin |
| 4          | NC        | No Connection   |
| 5          | $V_{OUT}$ | Output Pin      |

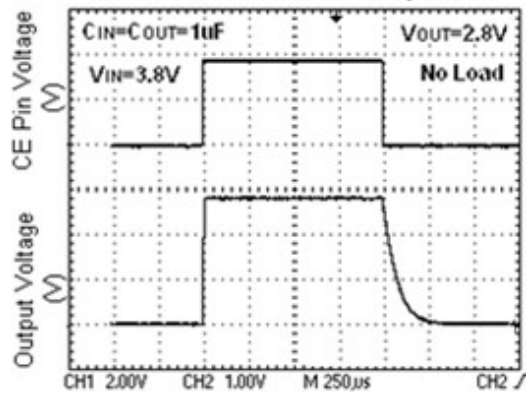
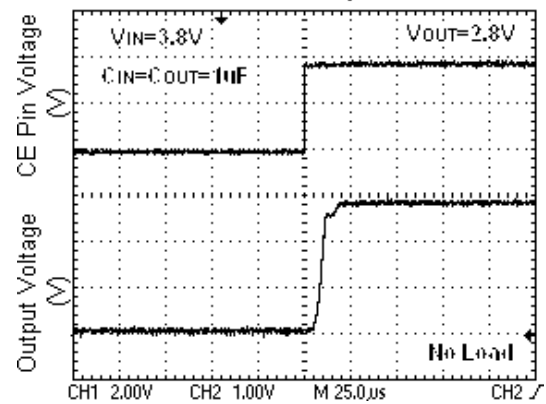
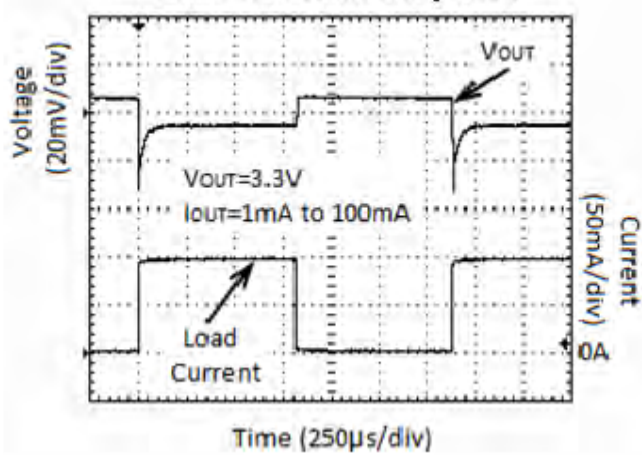
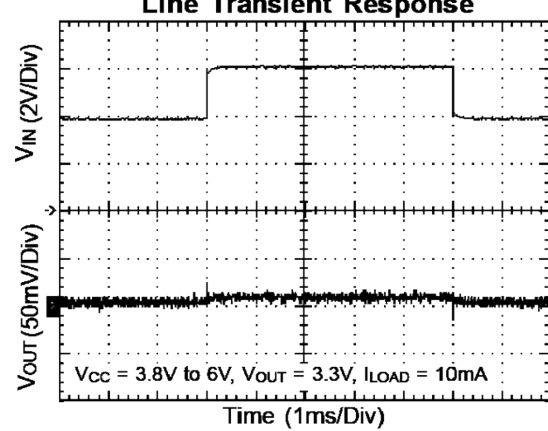
#### DFNWB1x1-4L

| PIN NUMBER | SYMBOL    | FUNCTION        |
|------------|-----------|-----------------|
| F          |           |                 |
| 1          | $V_{OUT}$ | Output Pin      |
| 2          | $V_{SS}$  | Ground          |
| 3          | CE        | Chip Enable Pin |
| 4          | $V_{IN}$  | Power Input Pin |

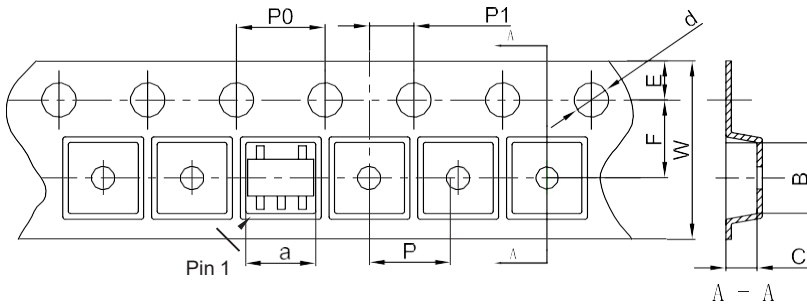


## ■ TYPICAL PERFORMANCE CHARACTERISTICS



**CE Pin Shutdown Response**

**Start Up**

**Load Transient Response**

**Line Transient Response**


## SOT-23-5L Embossed Carrier Tape

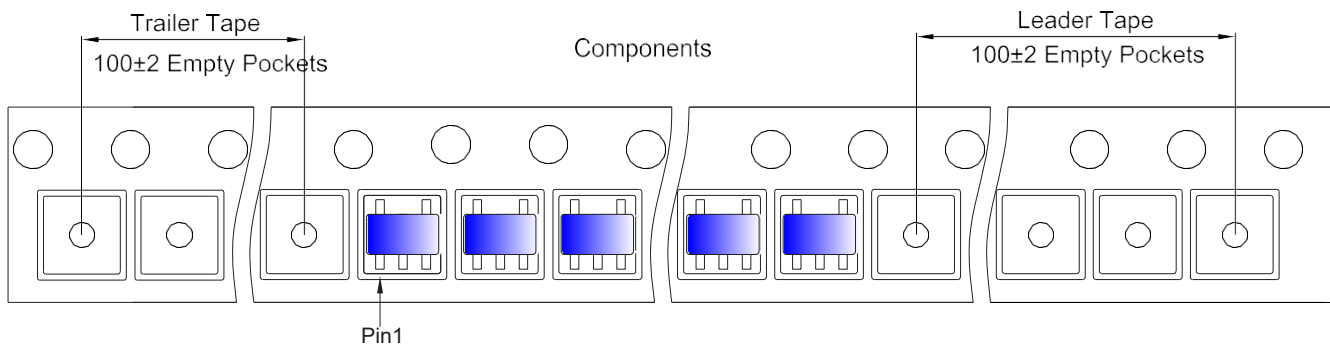


### Packaging Description:

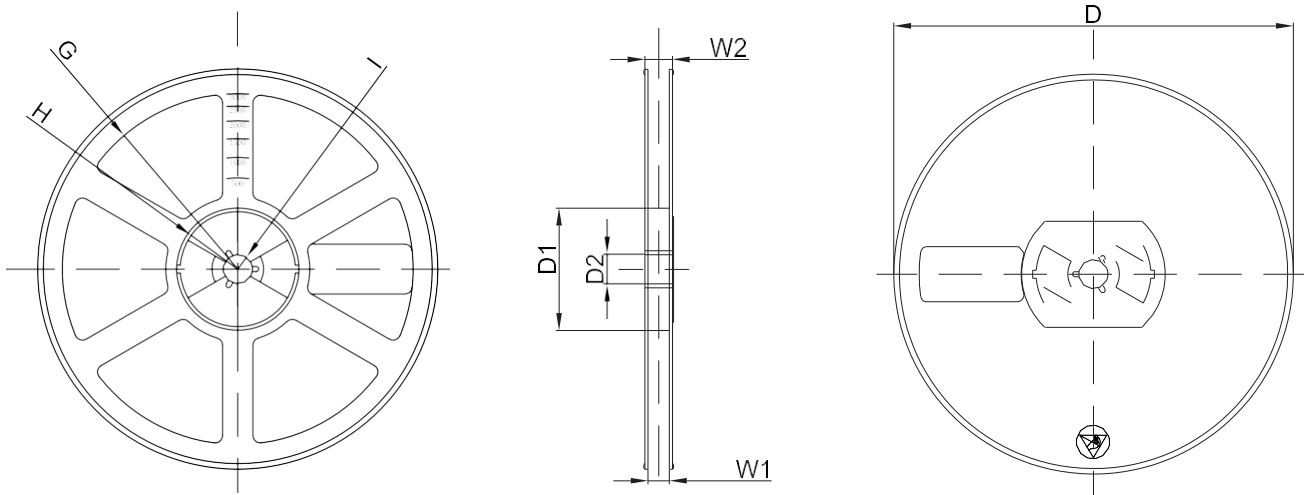
SOT-23-5L parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 18.0cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

| Dimensions are in millimeter |      |      |      |       |      |      |      |      |      |      |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type                     | a    | B    | C    | d     | E    | F    | P0   | P    | P1   | W    |
| SOT-23-5L                    | 3.17 | 3.23 | 1.37 | Ø1.55 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

## SOT-23-5L Tape Leader and Trailer



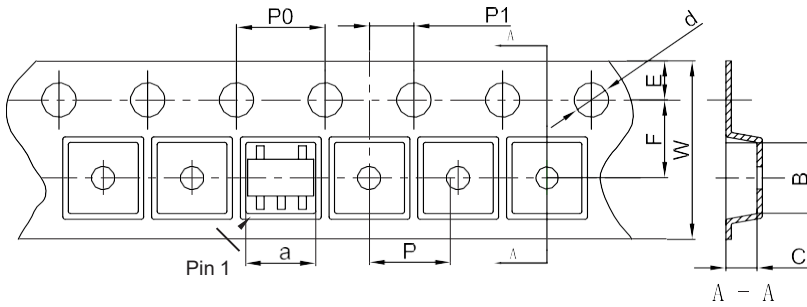
## SOT-23-5L Reel



| Dimensions are in millimeter |         |       |       |        |        |       |      |       |
|------------------------------|---------|-------|-------|--------|--------|-------|------|-------|
| Reel Option                  | D       | D1    | D2    | G      | H      | I     | W1   | W2    |
| 7"Dia                        | Ø180.00 | 60.00 | 13.00 | R78.00 | R25.60 | R6.50 | 9.50 | 13.10 |

| REEL     | Reel Size | Box        | Box Size(mm) | Carton      | Carton Size(mm) | G.W.(kg) |
|----------|-----------|------------|--------------|-------------|-----------------|----------|
| 3000 pcs | 7 inch    | 30,000 pcs | 203×203×195  | 120,000 pcs | 438×438×220     |          |

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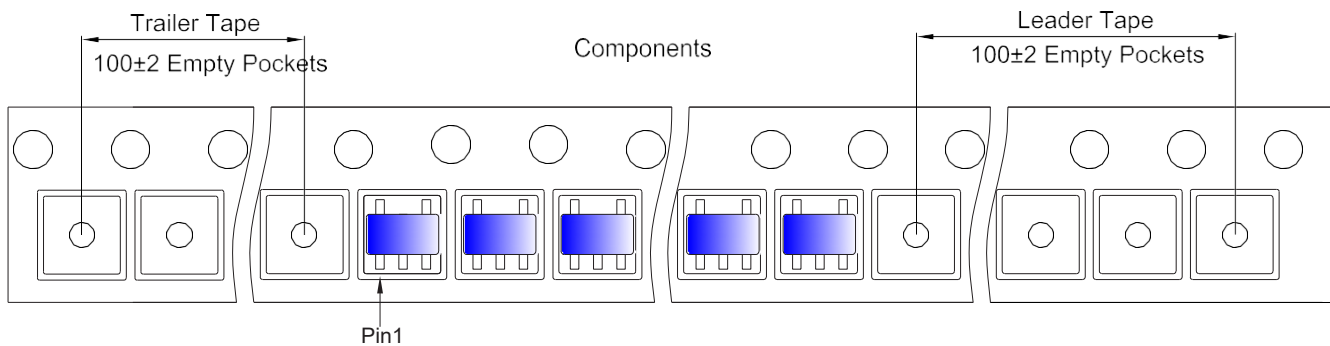


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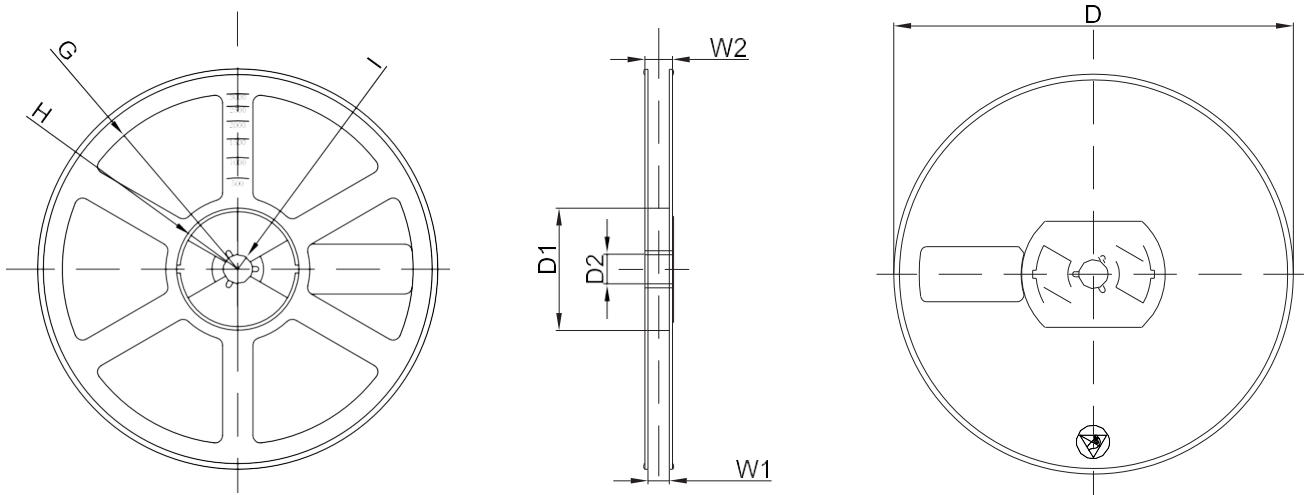
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