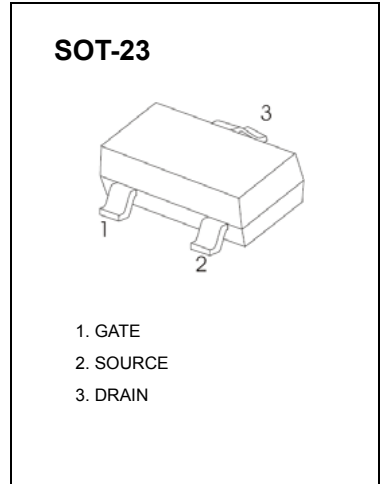


## SOT-23 Plastic-Encapsulate MOSFETs

### BSS84 P-CHANNEL MOSFET

| $V_{(BR)DSS}$ | $R_{DS(on)MAX}$ | $I_D$  |
|---------------|-----------------|--------|
| -50V          | 8Ω@-10V         | -0.13A |
|               | 10Ω@-5V         |        |



#### DESCRIPTION

These miniature surface mount MOSFETs reduce power loss conserve energy, making this device ideal for use in small power management circuitry.

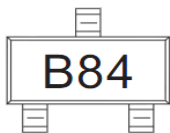
#### FEATURE

- Energy Efficient
- Low Threshold Voltage
- High-speed Switching
- Miniature Surface Mount Package Saves Board Space

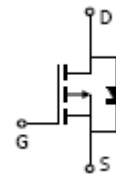
#### APPLICATION

- DC-DC converters, load switching, power management in portable and battery-powered products such as computers, printers, cellular and cordless telephones.

#### MARKING



#### Equivalent Circuit



#### MAXIMUM RATINGS ( $T_a=25^{\circ}C$ unless otherwise noted)

| Parameter  | Symbol          | Value    | Unit |
|--|-----------------|----------|------|
| Drain-Source Voltage   | $V_{DS}$        | -50      | V    |
| Gate-Source Voltage  | $V_{GS}$        | ±20      | V    |
| Continuous Drain Current   | $I_D$           | -0.13    | A    |
| Pulsed Drain Current (note 1) @tp <10 μs                                 | $I_{DM}$        | -0.52    | A    |
| Power Dissipation  | $P_D$           | 225      | mW   |
| Thermal Resistance from Junction to Ambient (note 2)                     | $R_{\theta JA}$ | 556      | °C/W |
| Junction Temperature   | $T_J$           | 150      | °C   |
| Storage Temperature  | $T_{STG}$       | -55~+150 | °C   |
| Maximum Lead Temperature for Soldering Purposes , Duration for 5 Seconds | $T_L$           | 260      | °C   |

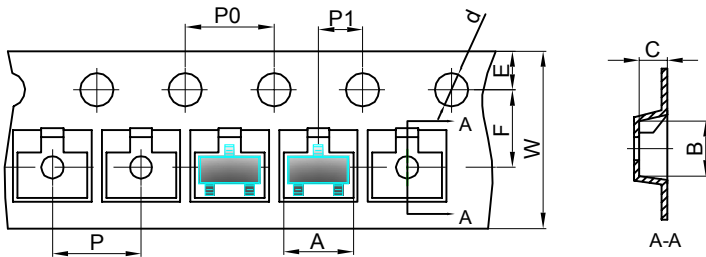






# SOT-23 Tape and reel

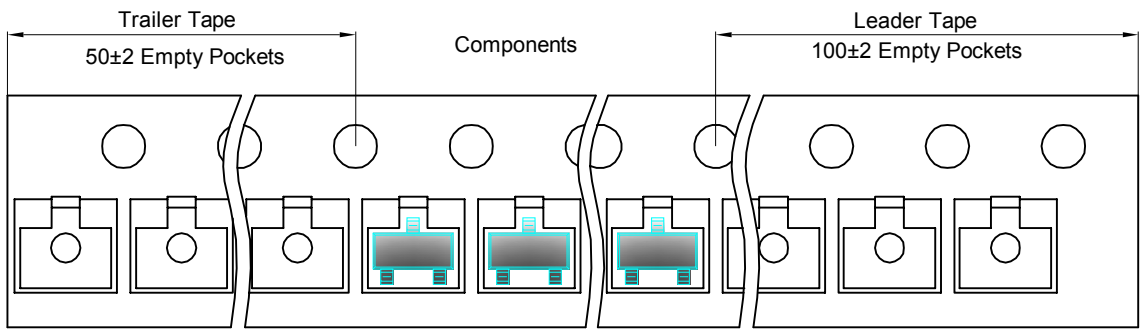
## SOT-23 Embossed Carrier Tape



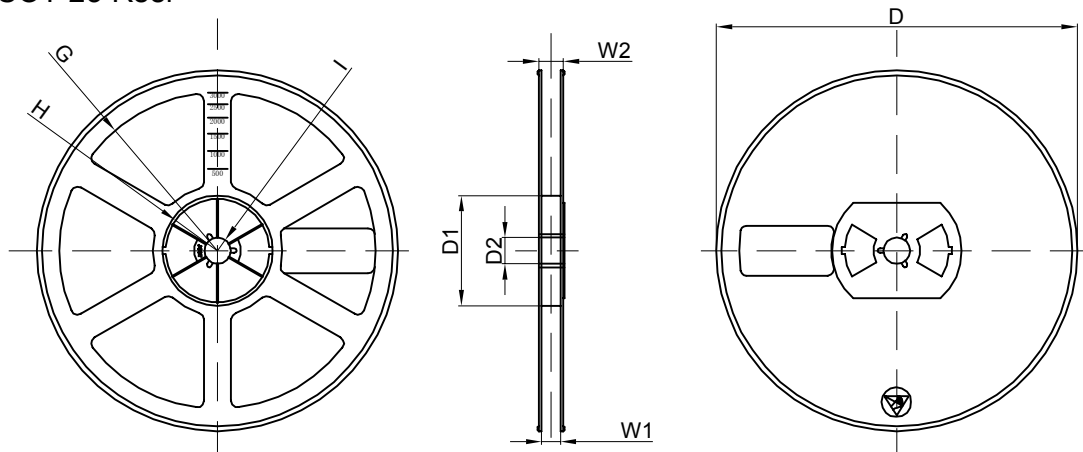
**Packaging Description:**  
 SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm 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                       | 3.15 | 2.77 | 1.22 | Ø1.50 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

## SOT-23 Tape Leader and Trailer



## SOT-23 Reel



| Dimensions are in millimeter |         |       |       |        |        |       |      |       |
|------------------------------|---------|-------|-------|--------|--------|-------|------|-------|
| Reel Option                  | D       | D1    | D2    | G      | H      | I     | W1   | W2    |
| 7" Dia                       | Ø178.00 | 54.40 | 13.00 | R78.00 | R25.60 | R6.50 | 9.50 | 12.30 |

| 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     |          |