

# EITS Series

## Right Angle Illuminated Tactile Switch



### Specifications

|                            |                           |
|----------------------------|---------------------------|
| <b>Function</b>            | Momentary Action          |
| <b>Contact Arrangement</b> | 1 make contact = STSP, NO |
| <b>Terminals</b>           | PIP, THT                  |
| <b>Contact Material</b>    | Silver / Gold plated      |

### Electrical Characteristics

|                            |                       |
|----------------------------|-----------------------|
| <b>Max. Power</b>          | 0.6 VA                |
| <b>Max. Voltage</b>        | 12 V                  |
| <b>Max. Current</b>        | 50 mA                 |
| <b>Dielectric Strength</b> | AC 250 V for 1 minute |
| <b>Contact Resistance</b>  | <= 100 mOhm           |
| <b>Bounce Time</b>         | <= 10 ms              |

### Environmental Characteristics

|                              |               |
|------------------------------|---------------|
| <b>Operating Temperature</b> | -40°C to 85°C |
| <b>Storage Temperature</b>   | -40°C to 85°C |

### Description

The EITS series are right angle illuminated tactile switches, available with both surface mount PIP terminal for reflow soldering and standard through hole configurations for wave soldering. EITS series offers the most common actuation forces with 1.6 N and 2.5 N versions, operating life at 500 K cycles. With a wide range of LED color and multiple custom caps options, the EITS series are ideal for a wide range of applications such as consumer electronics, servers, and audio/video devices.

### Features & Benefits

- Surface mount PIP terminal and standard through hole configurations
- Various LED colors / bi-color options
- High temperature cap available for PIP reflow soldering
- Unique Mylar surface perfect for pick-and-place process
- Customized cap markings/ logos upon request
- Tape and Reel packaging

### Applications

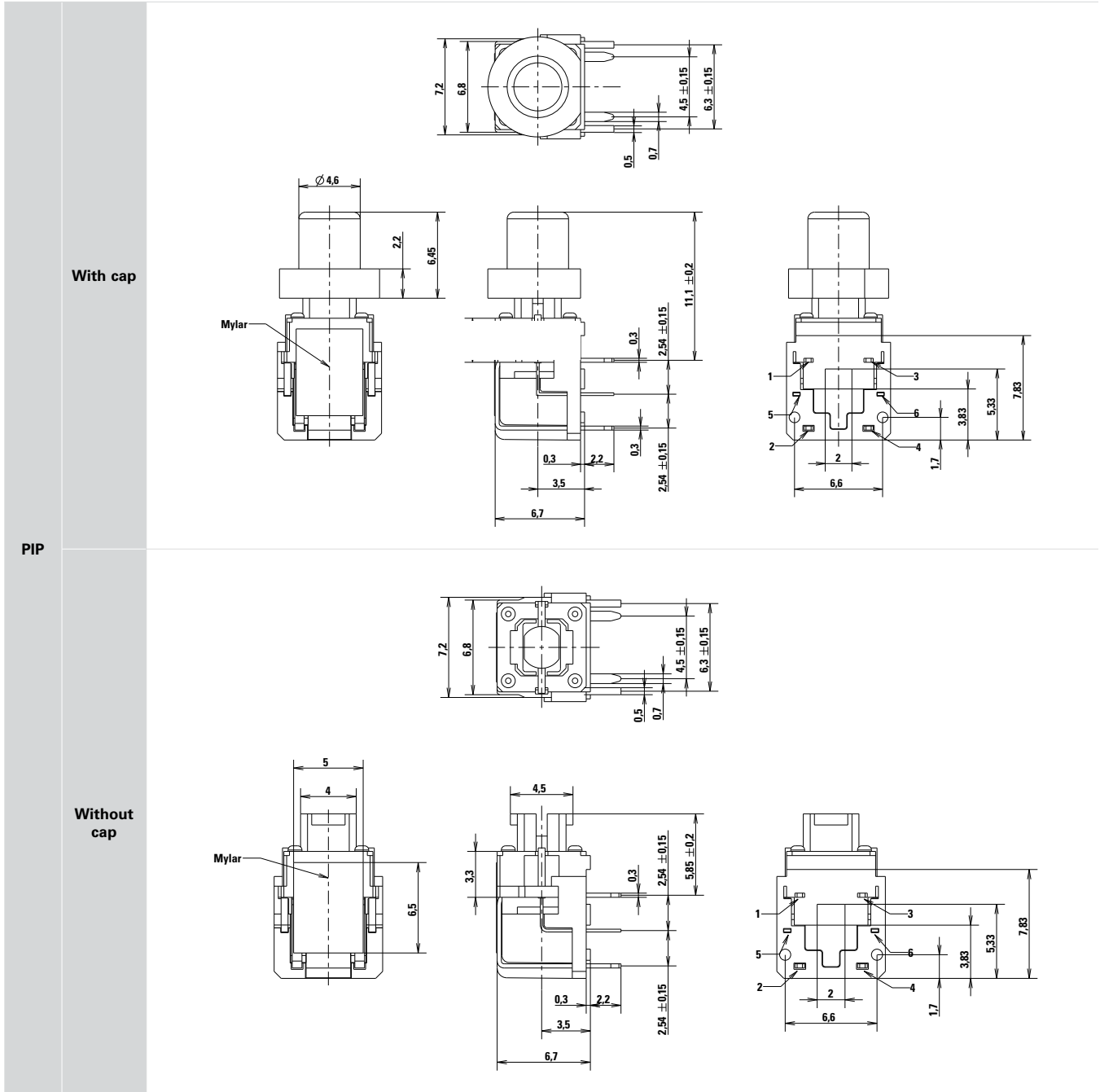
- Servers, Data centers
- Consumer electronics
- Audio / Video devices

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### Dimensions

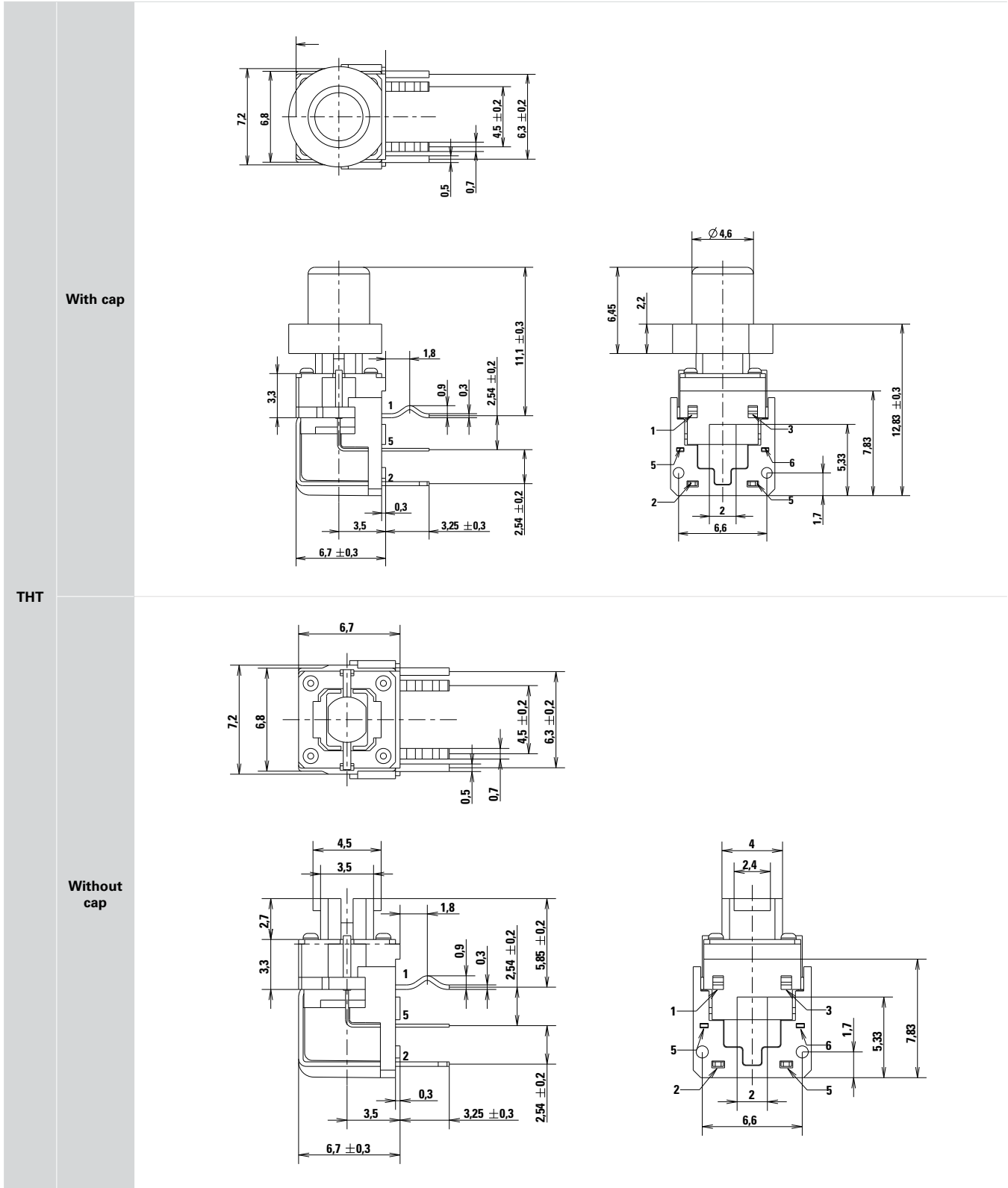


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### Dimensions



# EITS Series

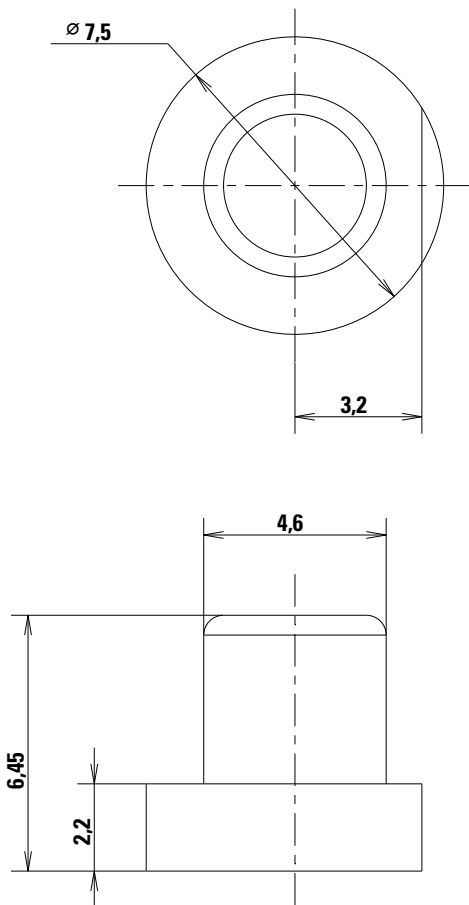
## Right Angle Illuminated Tactile Switch



### Mechanical Characteristics

| Terminal | Pin          | Force (N) | Operating Life (operations) | Travel (mm)     |
|----------|--------------|-----------|-----------------------------|-----------------|
| PIP      | EITSxxxxSxxx | 160 ± 50  | 500,000                     | 0.25 + 0.2/-0.1 |
|          |              | 250 ± 60  |                             |                 |
| THT      | EITSxxxxWxxx | 160 ± 50  | 500,000                     | 0.25 + 0.2/-0.1 |
|          |              | 250 ± 60  |                             |                 |

### Cap Sizes and Marking



| Cap Features |                   |
|--------------|-------------------|
| Code         | -                 |
| 1            | Clear/ no marking |
| 2            | Reset             |
| 3            | ⏻                 |
| 4            | ⦿                 |
| 5            | I D               |
| 6            | ⦿                 |
| 7            | ⦿                 |

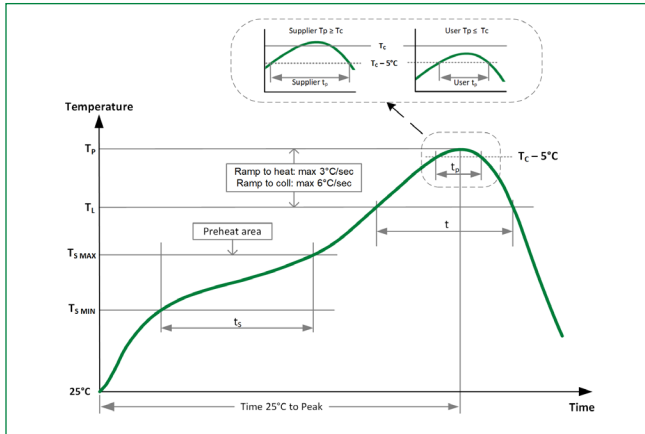
**Notes:**  
 Tolerance  
 0.0:+/-0.2  
 0.00:+/-0.1

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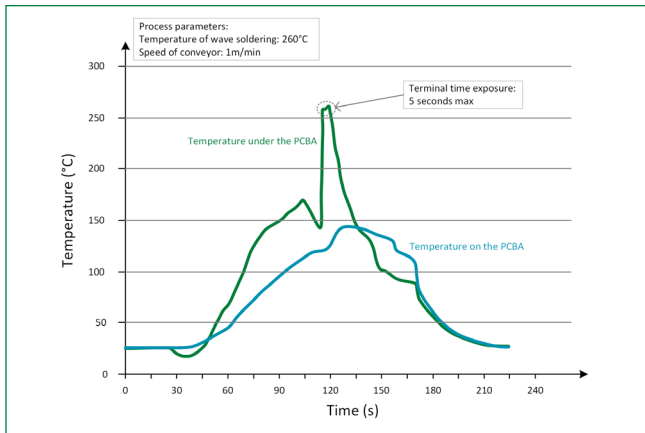


### Reflow Soldering Profile (for PIP)



|           |                                     |
|-----------|-------------------------------------|
| <b>Tp</b> | Peak package body temperature 260°C |
| <b>TL</b> | Liquidous temperature 217°C         |
| <b>Ts</b> | Preheat temperature 150-200°C       |
| <b>ts</b> | Preheat time 60-120 s               |
| <b>tp</b> | 30 s                                |
| <b>tL</b> | 60-150 s                            |

### Wave Soldering Profile (for THT)



|           |                           |
|-----------|---------------------------|
| <b>C1</b> | Temperature under the PCB |
| <b>C2</b> | Temperature on the PCB    |

**Process Parameters:**  
Temperature of wave soldering: 260°C  
Speed of conveyor: 1m/min

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### Pad Layout Dimensions

|     |             |  |   |
|-----|-------------|--|---|
| PIP | With Cap    |  | <p>Red or Amber or Yellow</p> <p>Green</p> <p>Single color led<br/>LED: GN Green<br/>BU Blue<br/>RD Red<br/>WH White<br/>YE Yellow</p> <p>Dual color led<br/>LED: RG Red-Green<br/>AG Amber-Green<br/>YG Yellow-Green</p> |
|     | Without Cap |  | <p>PCB LAYOUT</p>   |
| THT | With Cap    |  | <p>Blue</p> <p>Green</p> <p>Single color led<br/>LED: GN Green<br/>BU Blue<br/>RD Red<br/>WH White<br/>YE Yellow</p> <p>Dual color led<br/>LED: RG Red-Green<br/>AG Amber-Green<br/>YG Yellow-Green</p>                   |
|     | Without Cap |  | <p>PCB LAYOUT</p>   |

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### LED Characteristics

| Chip          |                                   |                                       | Lens Appearance   | Absolute Maximum Rating |         |              | Electro-optical Data (At 20 mA) |        |      |     |          |     |      |   |
|---------------|-----------------------------------|---------------------------------------|-------------------|-------------------------|---------|--------------|---------------------------------|--------|------|-----|----------|-----|------|---|
| Emitted Color | Peak Wave Length $\lambda_p$ (nm) | Dominant Wave Length $\lambda_d$ (nm) |                   | Pd (mW)                 | If (mA) | Peak If (mA) | $\Delta \lambda$ (nm)           | Vf (V) |      |     | Iv (mcd) |     |      | Viewing Angle $2\theta$ $\frac{1}{2}$ deg |
|               |                                   |                                       |                   |                         |         |              |                                 | Min    | Typ  | Max | Min      | Typ | Max  |   |
| Blue          | 465                               | 465-475                               | Water Transparent | 102                     | 30      | 125          | 25                              | 2.8    | 3.3  | 3.4 | 80       | 150 | 250  | 120                                       |
| Green         | 573                               | 565-576                               |                   | 75                      |         |              | 19                              | 1.7    | 2.05 | 2.5 | 32       | 60  | 100  |   |
| Red           | 630                               | 615-630                               |                   | 75                      |         |              | 18                              | 1.7    | 2.0  | 2.5 | 125      | 210 | 400  |   |
| White         | -                                 | -                                     |                   | 111                     |         |              | -                               | 2.8    | 3.1  | 3.7 | 250      | 495 | 800  |   |
| Yellow        | 591                               | 585-595                               |                   | 75                      |         |              | 18                              | 1.7    | 2.1  | 2.5 | 80       | 150 | 250  |   |
| Red           | 631                               | 620-630                               |                   | 75                      |         |              | 20                              | 1.7    | 2.0  | 2.5 | 320      | 550 | 1000 |   |
| Green         | 520                               | 520-530                               |                   | 111                     |         |              | 33                              | 2.8    | 3.3  | 3.7 | 400      | 700 | 1250 |   |
| Yellow        | 590                               | 588-600                               |                   | 75                      |         |              | 20                              | 1.6    | 2.0  | 2.5 | 100      | 170 | 320  |   |
| Green         | 574                               | 565-575                               |                   | 75                      |         |              | 20                              | 1.7    | 2.0  | 2.5 | 32       | 50  | 100  |   |
| Amber         | 608                               | 600-610                               |                   | 75                      |         |              | 18                              | 1.7    | 2.0  | 2.5 | 80       | 140 | 250  |   |
| Green         | 520                               | 520-525                               |                   | 111                     |         |              | 35                              | 1.7    | 2.0  | 2.5 | 500      | 800 | 1600 |   |

**Remark:** Viewing angle is the OFF-axis angle at which the luminous intensity is half the axial luminous intensity.

### LED Absolute Maximum Rating (Ta=25°C)

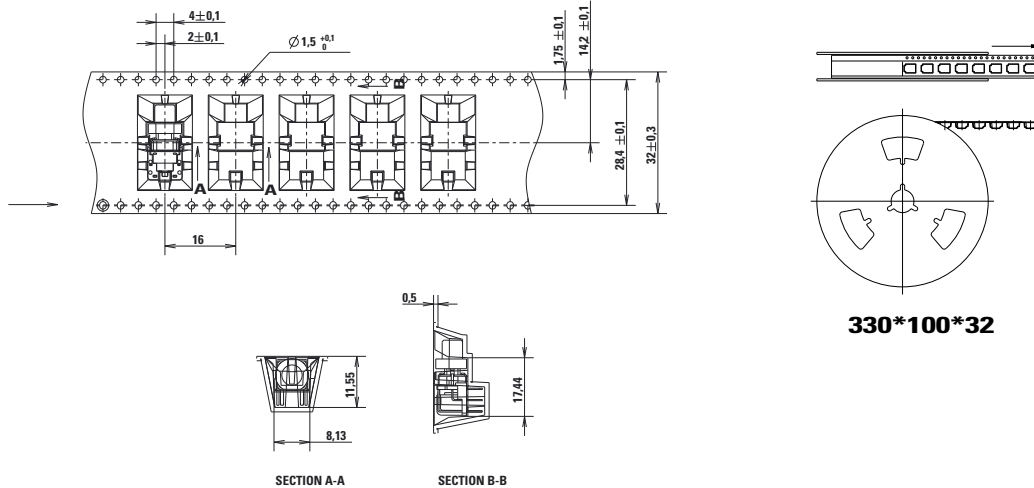
|                             |                      |
|-----------------------------|----------------------|
| Reverse Voltage             | 5V                   |
| Reverse Current             | 10 $\mu$ A           |
| Operating Temperature Range | -40°C to 85°C        |
| Storage Temperature Range   | -40°C to 85°C        |
| Lead Soldering Temperature  | 260°C for 10 seconds |

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### Packaging Dimensions (mm)

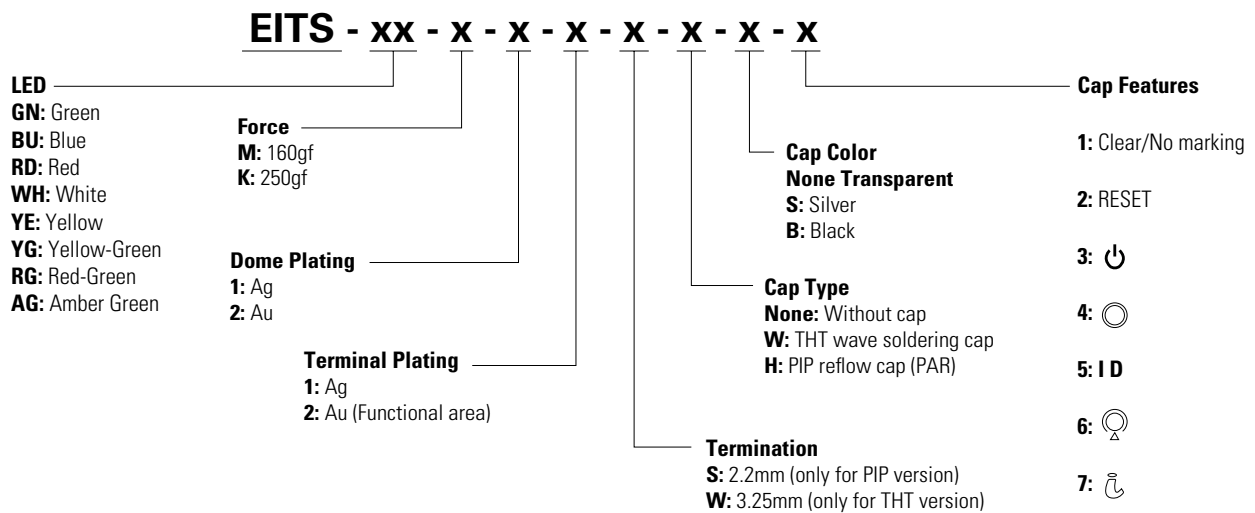


### Packaging Details

|                              | PIP/THT                               |
|------------------------------|---------------------------------------|
| Type                         | Tape and reel                         |
| Number of parts in packaging | 300                                   |
| Other Information            | EIS 481                               |
| Transport Condition          | According to specification NF H00-060 |

### Ordering Number

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category. For any part number different from those listed below, please consult your local representative.



### Liability Limitation

This datasheet does not provide enough information for applications that require a certain level of quality or safety such as automotive, medical systems, or safety equipment. Please contact customer service for the contractual specification package.

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