

### FEATURES

- RoHS compliant
- Primary current rating 10A
- 20 to 200 turn variants
- Primary to secondary isolation 500Vrms
- 50kHz-500kHz frequency range
- Surface mount
- Industry-standard footprint
- UL94 V-0 package materials
- J-STD-020C reflow

### PRODUCT OVERVIEW

The 5300 series of current sense transformers are designed to monitor AC currents. The transformers can be used for high frequency current sensing in applications such as switched-mode power supplies, motor control, and electronic lighting ballasts.

### SELECTION GUIDE

| Order Code | Turns Ratio | Min. Secondary Inductance<br>mH | Max. DC Resistance  |                      | Isolation Voltage <sup>1</sup><br>Vrms | Terminating Resistance to produce 1V <sub>out</sub> /1A <sub>in</sub><br>Ω |
|------------|-------------|---------------------------------|---------------------|----------------------|--|--|
|            |             |                                 | Primary (8-7)<br>mΩ | Secondary (1-3)<br>Ω |  |  |
| 53020C     | 1:20        | 0.08                            | 7.0                 | 0.55                 | 500                                    | 20   |
| 53030C     | 1:30        | 0.18                            | 7.0                 | 0.85                 | 500                                    | 30   |
| 53040C     | 1:40        | 0.32                            | 7.0                 | 1.10                 | 500                                    | 40   |
| 53050C     | 1:50        | 0.50                            | 7.0                 | 1.75                 | 500                                    | 50   |
| 53060C     | 1:60        | 0.72                            | 7.0                 | 2.20                 | 500                                    | 60   |
| 53070C     | 1:70        | 0.98                            | 7.0                 | 4.50                 | 500                                    | 70   |
| 53100C     | 1:100       | 2.00                            | 7.0                 | 5.60                 | 500                                    | 100  |
| 53125C     | 1:125       | 3.00                            | 7.0                 | 7.50                 | 500                                    | 125  |
| 53150C     | 1:150       | 4.50                            | 7.0                 | 17.50                | 500                                    | 150  |
| 53200C     | 1:200       | 8.00                            | 7.0                 | 34.00                | 500                                    | 200  |

### ABSOLUTE MAXIMUM RATINGS

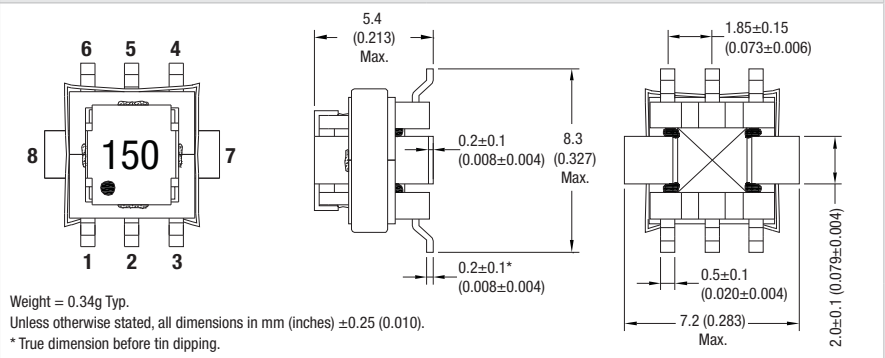
|                                      |                |
|--------------------------------------|----------------|
| Operating free air temperature range | -40°C to 125°C |
| Storage temperature range            | -40°C to 155°C |

### SOLDERING INFORMATION<sup>2</sup>

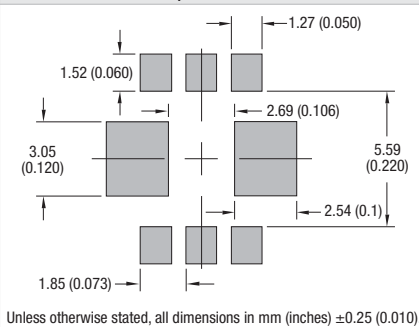
|                                |       |
|--------------------------------|-------|
| Peak reflow solder temperature | 250°C |
| Pin finish                     | Tin   |
| Moisture sensitivity level     | 1     |

### PACKAGE SPECIFICATIONS

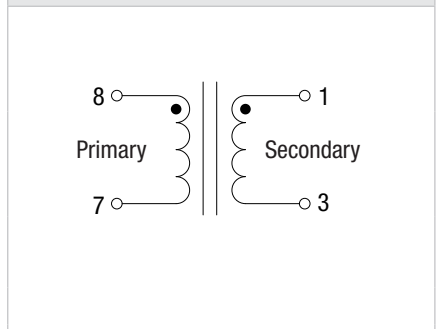
#### Mechanical Dimensions



#### Recommended Footprint Details



#### Schematic



Specifications typical at T<sub>A</sub> = 25°C

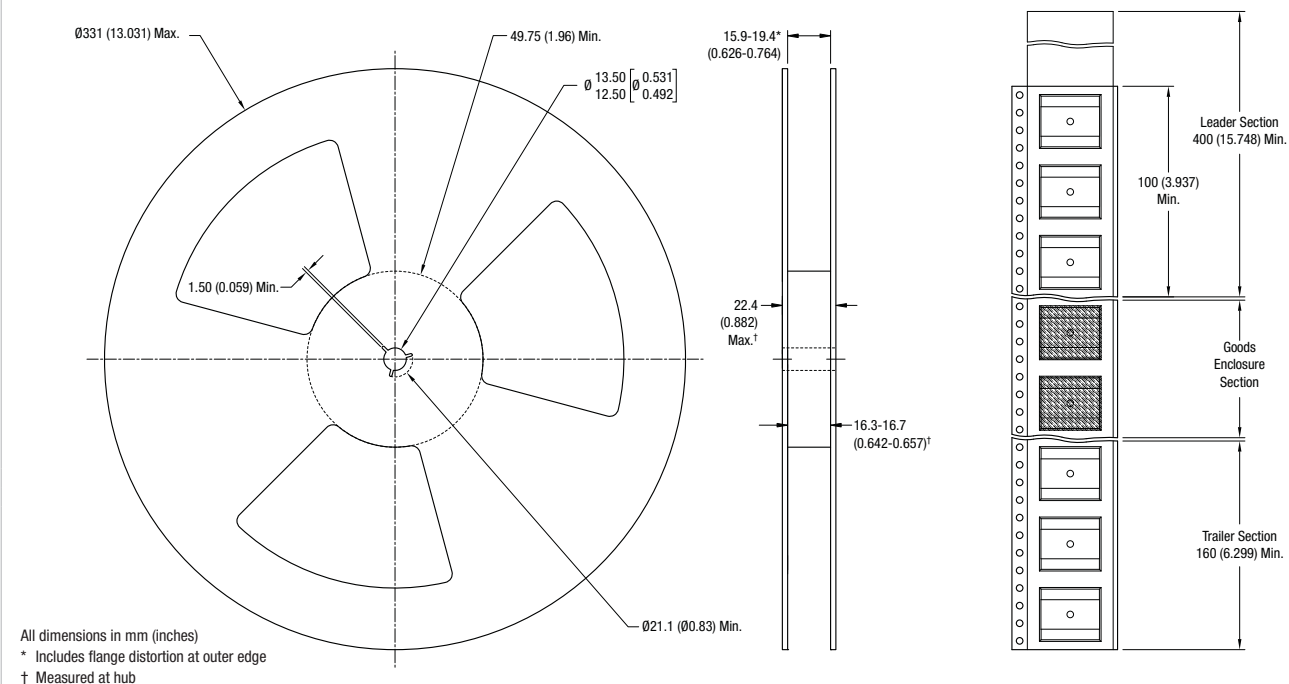
1 Flash tested for 1 second.

2 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

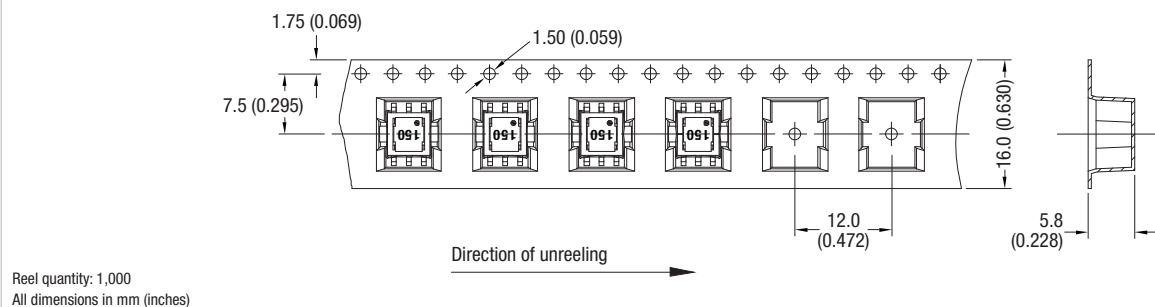


### PACKAGE SPECIFICATIONS

#### Reel Dimensions



#### Tape Outline Dimensions



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 ISO 9001 and 14001 REGISTERED

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