

Installation Instructions for the SS49E/SS59ET Series Economical Linear Hall-effect Sensors

ISSUE 1
50000353

WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.


ELECTRICAL CHARACTERISTICS AT $V_s = 5.0\text{ V}$

| | | | |
|------------------------------------|-------------------------------------|-------------|--------------|
| Supply Voltage | 3.0 Vdc to 6.5 Vdc | | |
| Supply Current | 6 mA typical | | |
| Output Type | Linear, sourcing | | |
| Output Voltage @ 0 Gauss, 25 °C | 2.25 V to 2.75 V | | |
| Sensitivity (mV/G) | Min. 1.0 | Typ. 1.4 | Max. 1.75 |
| Operating Temperature | -40 °C to 100 °C [-40 °F to 212 °F] | | |

ABSOLUTE MAXIMUM RATINGS*

| | |
|-----------------------------|-------------------------------------|
| Supply Voltage (V_s) | -0.5 Vdc to 8.0 Vdc |
| Output Current | 10 mA |
| Storage Temperature | -55 °C to 165 °C (-67 °F to 329 °F) |

*Absolute maximum ratings are the extreme limits the device will withstand without damage to the device. However, the electrical and mechanical characteristics are not guaranteed as the maximum limits (above recommended operating conditions) are approached, nor will the device necessarily operate at absolute maximum ratings.



CAUTION
ELECTROSTATIC
SENSITIVE
DEVICES
DO NOT OPEN OR HANDLE
EXCEPT AT A STATIC
FREE WORKSTATION



ESD SENSITIVITY:
CLASS 3

SOLDERING INSTRUCTIONS

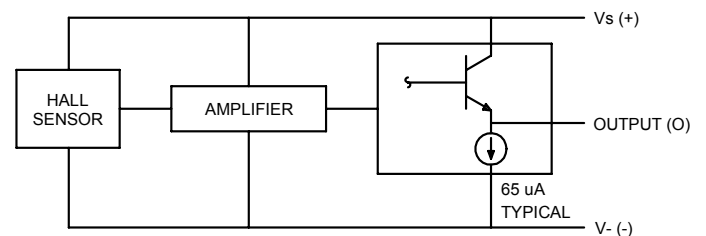
Through-hole leads: Wave solder at 250 °C to 260 °C [482 °F to 500 °F] for a maximum of three seconds.

Surface-mount: Use infrared reflow process with peak temperatures not to exceed 245 °C [473 °F].

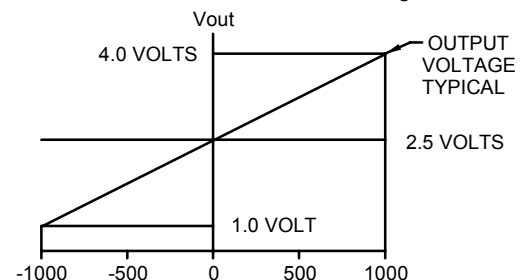
CLEANING

Use agitated rinse. **Do not use pressure wash.** High-pressure stream could force contaminants into package.

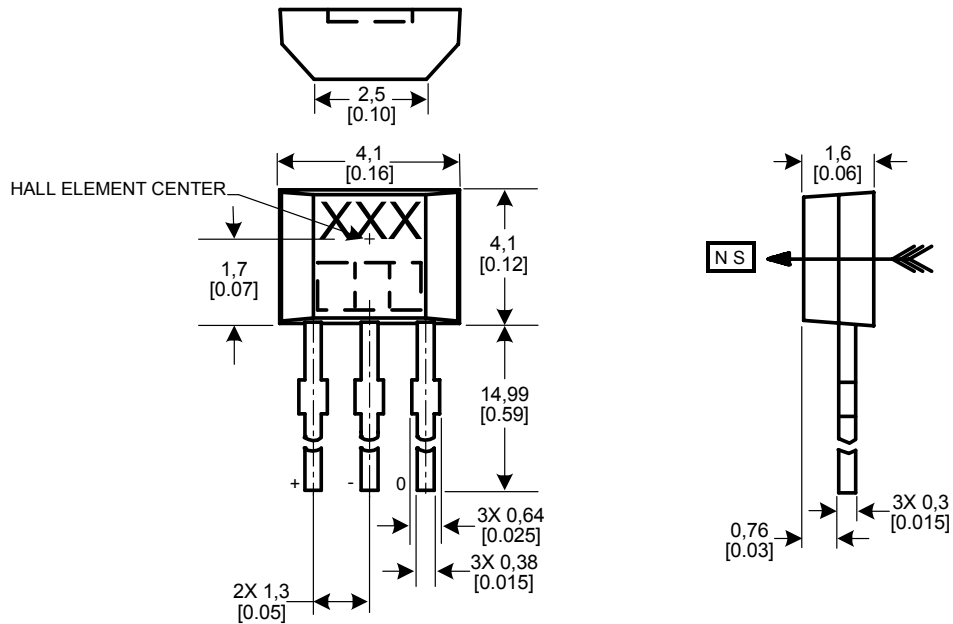
BLOCK DIAGRAM CURRENT SOURCING OUTPUT



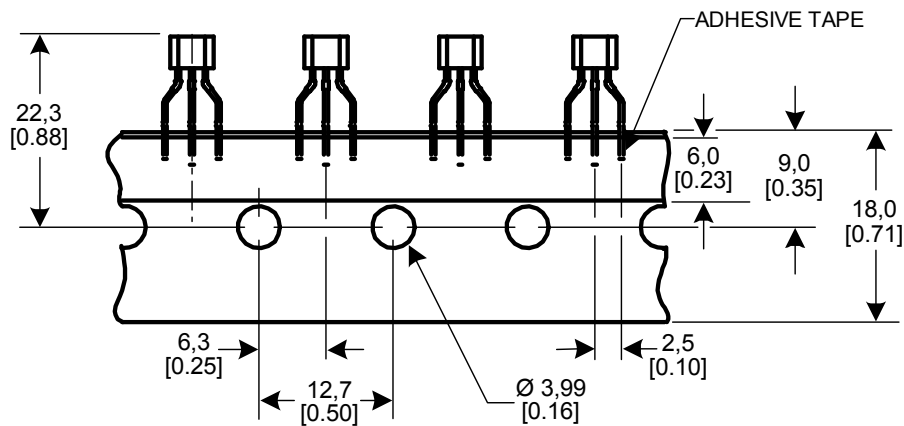
TRANSFER CHARACTERISTICS AT $V_s = 5.0\text{ VDC}$



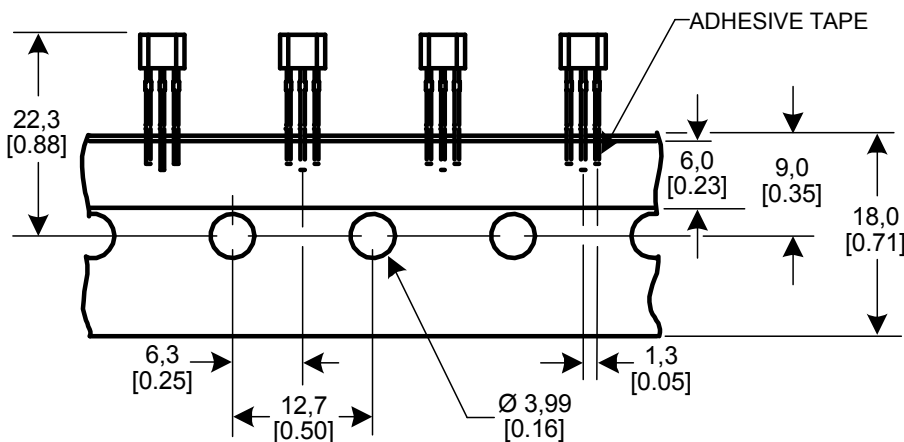
SS49E SERIES MOUNTING DIMENSIONS mm/[in] (for reference only)



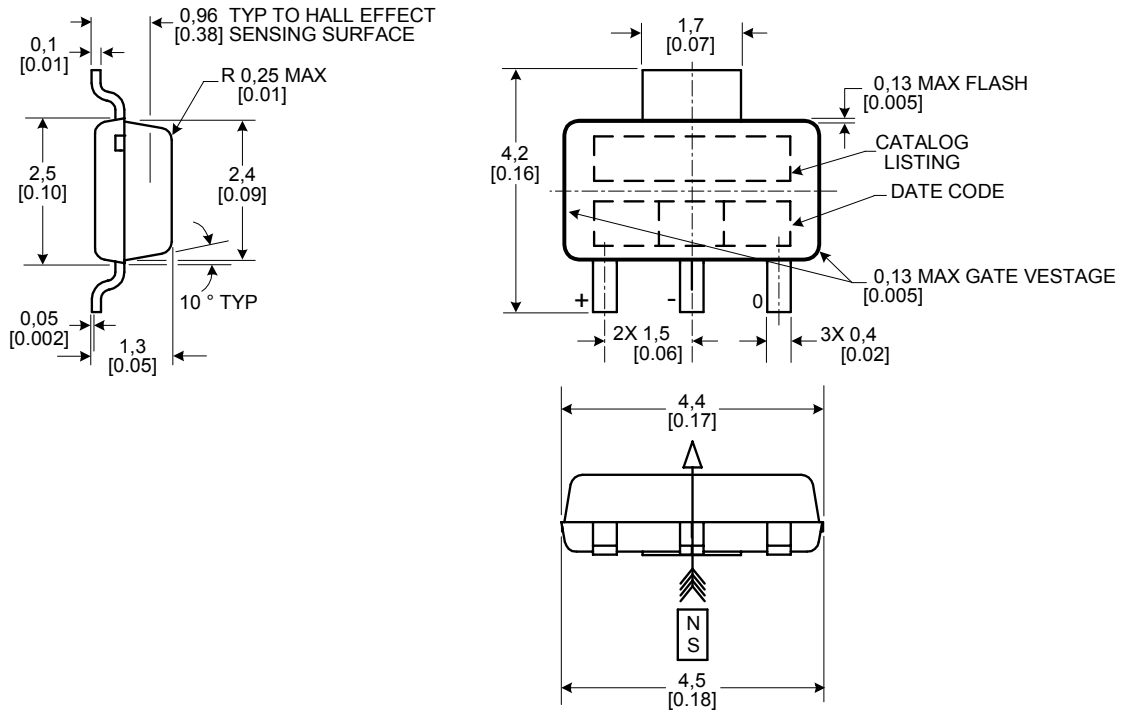
TAPE DIMENSIONS FOR STYLE T2 mm/[in] (for reference only)



TAPE DIMENSIONS FOR STYLE T3 mm/[in] (for reference only)

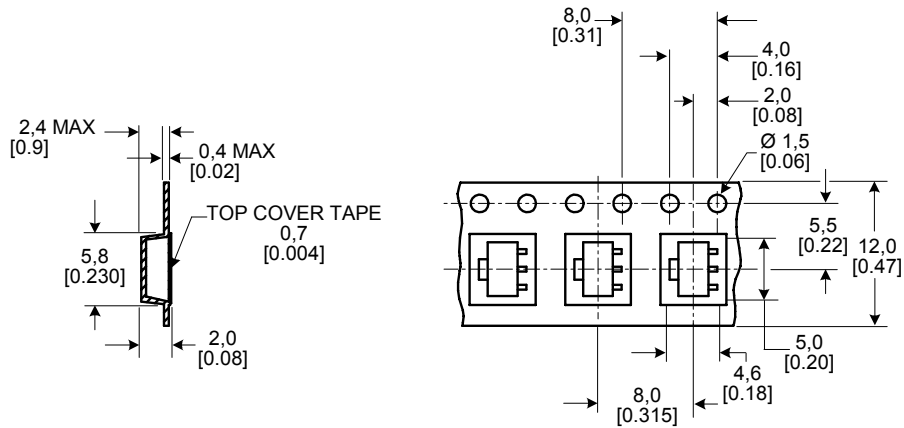


SS59E SERIES MOUNTING DIMENSIONS mm/[in] (for reference only)

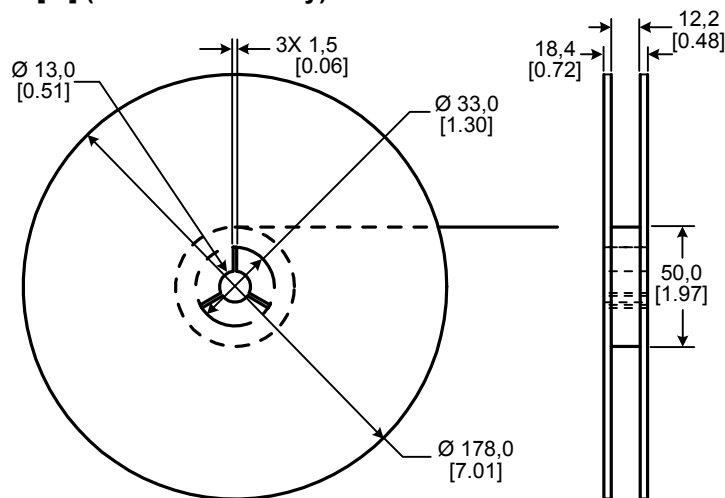


TAPE DIMENSIONS mm/[in] (for reference only)

This product is sold in tape and reel form only, per EIA STD 481. There are 1,000 parts per reel.



REEL DIMENSIONS (mm/[in] (for reference only)



WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. **The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.**

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While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application. For application assistance, current specifications, or name of the nearest Authorized Distributor, contact a nearby sales office. Or call:

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50000353-1-EN IL50 GLO 0803 Printed in USA
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