DF1P

Vishay Semiconductors

VISHAY. www.vishay.com

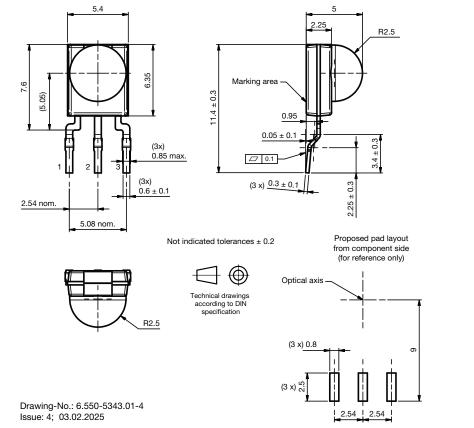


LINKS TO ADDITIONAL RESOURCES

| | 30 | | |
|--------------|-----------|-------------|---------|
| Product Page | 3D Models | Calculators | Marking |

| NAME | LENS AXIS (X) | VIEW | TYPE | HEIGHT (H) | WIDTH (W) | DEPTH (D) |
|------|---------------|------|------|------------|-----------|-----------|
| DF1P | 8.85 | - | Bend | 11.4 | 5.4 | - |

MECHANICAL DIMENSIONS in millimeters



Rev. 2.0, 04-Feb-2025

1

Document Number: 82764

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000



ASSEMBLY INSTRUCTIONS

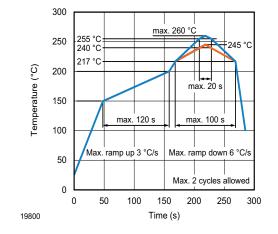
Reflow Soldering

- Reflow soldering must be done within 72 h while stored under a max. temperature of 30 °C, 60 % RH after opening the dry pack envelope
- Set the furnace temperatures for pre-heating and heating in accordance with the reflow temperature profile as shown in the diagram. Exercise extreme care to keep the maximum temperature below 260 °C. The temperature shown in the profile means the temperature at the device surface. Since there is a temperature difference between the component and the circuit board, it should be verified that the temperature of the device is accurately being measured
- Handling after reflow should be done only after the work surface has been cooled off

VISHAY LEAD (Pb)-FREE REFLOW SOLDER PROFILE

Manual Soldering

- Use a soldering iron of 25 W or less. Adjust the temperature of the soldering iron below 300 °C
- Finish soldering within 3 s
- Handle products only after the temperature has cooled off

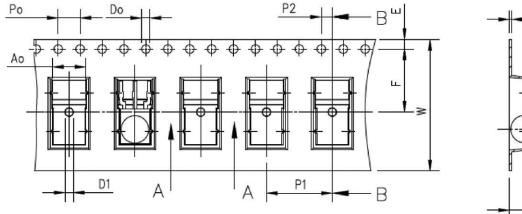


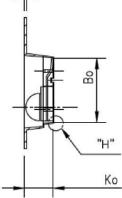
WISHAY. www.vishay.com

Vishay Semiconductors

Т

PACKAGING DIMENSIONS in millimeters

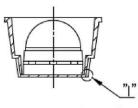




B-B SECTION

Bo (on a place in the middle of the corner radii)

DETAIL"H"



A-A SECTION(DETAIL)

Drawing-No.: 9.700-5399.01-4 Issue: 2; 29.06.18

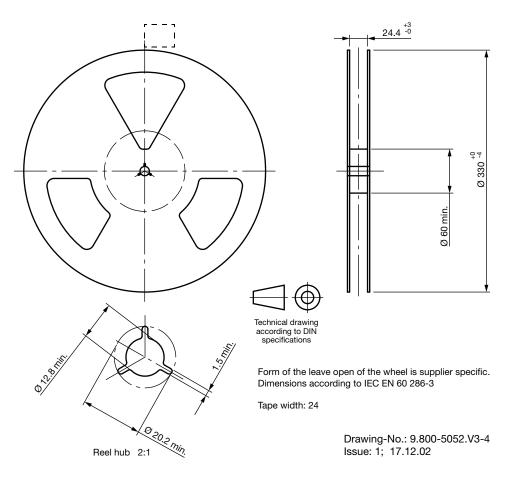
| Item | A ₀ | B ₀ | K ₀ | P ₀ | P ₁ | P ₂ | Т |
|------------|----------------|----------------|-----------------|----------------|--------------------|------------------|-----------------|
| Dimensions | 6.08 ± 0.10 | 11.75 ± 0.10 | 5.25 ± 0.10 | 4.0 ± 0.10 | 12.0 ± 0.10 | 2.0 ± 0.10 | 0.40 ± 0.05 |
| Item | E | F | D ₀ | D ₁ | W | 10P ₀ | |
| Dimensions | 1.75 ± 0.10 | 11.50 ± 0.10 | 1.55 ± 0.05 | 1.5 min. | 24.0 +0.30 / -0.10 | 40.0 ± 0.20 | |

Ao (on a place in the middle of the corner radii)

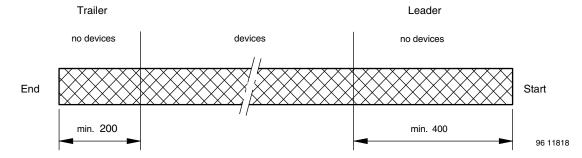
DETAIL"I"



REEL DIMENSIONS in millimeters



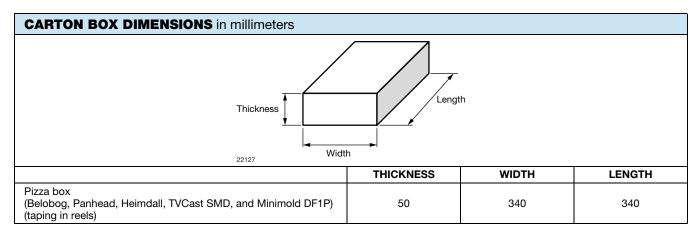
LEADER AND TRAILER DIMENSIONS in millimeters





OUTER PACKAGING

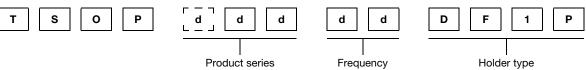
The sealed reel is packed into a pizza box.



COVER TAPE PEEL STRENGTH

According to DIN EN 60286-3 0.1 N to 1.3 N 300 mm/min. ± 10 mm/min. 165° to 180° peel angle

ORDERING INFORMATION



Note

• d = "digit", please consult the list of available series on the previous page to create a valid part number

(2 or 3 digits)

Example: TSOP53538DF1P

PACKAGING QUANTITY

• 1100 pieces per reel

• 1 reel per box

LABEL

Standard bar code labels for finished goods

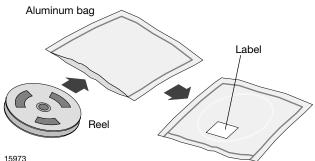
The standard bar code labels are product labels and used for identification of goods. The finished goods are packed in final packing area. The standard packing units are labeled with standard bar code labels before transported as finished goods to warehouses. The labels are on each packing unit and contain Vishay Semiconductor GmbH specific data.



| VISHAY SEMICONDUCTOR GmbH STANDARD BAR CODE PRODUCT LABEL (finished goods) | | | |
|----------------------------------------------------------------------------|--------------|--------------|--|
| PLAIN WRITING | ABBREVIATION | LENGTH | |
| Item-description | - | 18 | |
| Item-number | INO | 8 | |
| Selection-code | SEL | 3 | |
| LOT-/serial-number | BATCH | 10 | |
| Data-code | COD | 3 (YWW) | |
| Plant-code | PTC | 2 | |
| Quantity | QTY | 8 | |
| Accepted by | ACC | - | |
| Packed by | PCK | - | |
| Mixed code indicator | MIXED CODE | - | |
| Origin | XXXXXXX+ | Company logo | |
| LONG BAR CODE TOP | ТҮРЕ | LENGTH | |
| Item-number | Ν | 8 | |
| Plant-code | Ν | 2 | |
| Sequence-number | Х | 3 | |
| Quantity | Ν | 8 | |
| Total length | - | 21 | |
| SHORT BAR CODE BOTTOM | ТҮРЕ | LENGTH | |
| Selection-code | Х | 3 | |
| Data-code | Ν | 3 | |
| Batch-number | Х | 10 | |
| Filter | - | 1 | |
| Total length | - | 17 | |

DRY PACKING

The reel is packed in an anti-humidity bag to protect the devices from absorbing moisture during transportation and storage.



FINAL PACKING

The sealed reel is packed into a cardboard box. A secondary cardboard box is used for shipping purposes.

RECOMMENDED METHOD OF STORAGE

Dry box storage is recommended as soon as the aluminum bag has been opened to prevent moisture absorption. The following conditions should be observed, if dry boxes are not available:

- Storage temperature 10 °C to 30 °C
- Storage humidity \leq 60 % RH max.

After more than 72 h under these conditions moisture content will be too high for reflow soldering.

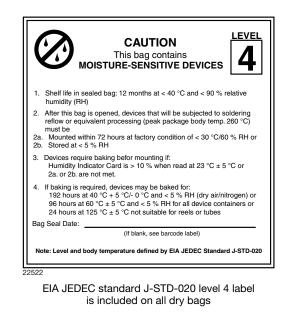
Rev. 2.0, 04-Feb-2025

In case of moisture absorption, the devices will recover to the former condition by drying under the following condition: 192 h at 40 °C + 5 °C / - 0 °C and < 5 % RH (dry air / nitrogen) or

96 h at 60 $^{\circ}\text{C}$ + 5 $^{\circ}\text{C}$ and < 5 % RH for all device containers or

24 h at 125 °C + 5 °C not suitable for reel or tubes.

An EIA JEDEC[®] standard J-STD-020 level 4 label is included on all dry bags.



Document Number: 82764

THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u>



ESD PRECAUTION

Proper storage and handling procedures should be followed to prevent ESD damage to the devices especially when they are removed from the antistatic shielding bag. Electrostatic sensitive devices warning labels are on the packaging.

VISHAY SEMICONDUCTORS STANDARD BAR CODE LABELS

The Vishay Semiconductors standard bar code labels are printed at final packing areas. The labels are on each packing unit and contain Vishay Semiconductors specific data.

