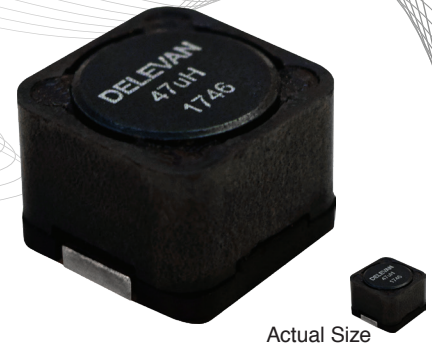




# HRSPD125

## Shielded Surface Mount Inductors High Reliability Applications



### Features and Benefits

Built to meet the following environmental requirements:

- High-Frequency Vibration: MIL-STD-202, Method 204 Test Condition D.
- Mechanical Shock: MIL-STD-202, Method 213 Test Condition I.
- Thermal Shock: MIL-PRF-27, -55°C to +130°C, 25 Cycles.
- Solderability: MIL-STD-202, Method 208.
- Burn-In: 96 Hours at 130°C.
- Moisture Resistance: MIL-STD-202, Method 106.
- Double Cycle SnPb Reflow Profile: MIL-PRF-83446, Section 4.6.18.
- +/-15% and +/-10% tolerances are available upon request.

### Parameters

**Current Rating at 90°C Ambient** 40°C Temp Rise Maximum

**Maximum Ambient Temperature** 90°C

**Operating Temperature Range** -55°C to +130°C

**Part Storage Temperature Range** -55°C to +125°C

**Maximum Power Dissipation at 90°C** 0.560 Watts Maximum

**Inductance** Measured at 1.0V AC at 100 kHz or 10 kHz

**Weight/Mass** 4.0 grams (0.14 ounces) Maximum

**Packaging** Tape and Reel (250 pieces max. / 13" reel)

### Core Material / Termination Finish

Ferrite Core and Shield

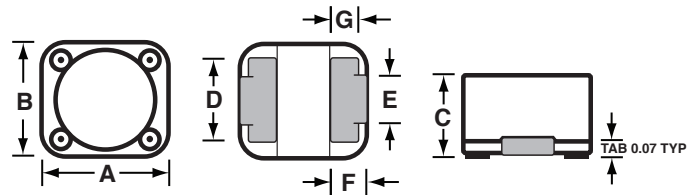
Sn 90 / Pb 10 Tinned Brass Leads

### Testing Level 1

Electrical Characteristics L, DCR

Country of Origin: Mexico

### Dimensions

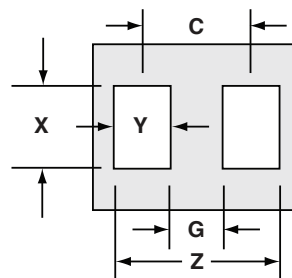


|   | Inches        | Millimeters  |
|---|---------------|--------------|
| A | 0.475 ± 0.004 | 12.07 ± 0.10 |
| B | 0.475 ± 0.004 | 12.07 ± 0.10 |
| C | 0.283 maximum | 7.02 maximum |
| D | 0.340 ± 0.005 | 8.64 ± 0.13  |
| E | 0.175 ± 0.005 | 4.45 ± 0.13  |
| F | 0.130 ± 0.010 | 3.30 ± 0.25  |
| G | 0.110 ± 0.005 | 2.80 ± 0.13  |

Dimensions A and C are over terminals

### Suggested Land Pattern

|   | Inches | Millimeters |
|---|--------|-------------|
| Z | 0.535  | 13.59       |
| G | 0.190  | 4.83        |
| X | 0.350  | 9.14        |
| Y | 0.173  | 4.39        |
| C | 0.363  | 9.22        |



TESTING  
LEVEL 1TEMPERATURE  
RANGE -55/+130

# HRSPD125

Shielded Surface Mount Inductors  
High Reliability Applications



Actual Size

## FERRITE CORE

| Part Number<br>Prefix | Inductance<br>(uH) | Percentage<br>Tolerance (+/-) | Test Freq<br>(kHz) | DCR Max<br>(Ohms) | Incremental (Saturation)<br>Current (AMPS DC)<br>10% Decrease in<br>Inductance (Typical) | Rated Current<br>(Amps) |
|-----------------------|--------------------|-------------------------------|--------------------|-------------------|------------------------------------------------------------------------------------------|-------------------------|
| HRSPD125-222M         | 2.2                | 20                            | 100                | 0.010             | 11.27                                                                                    | 7.50                    |
| HRSPD125-332M         | 3.3                | 20                            | 100                | 0.012             | 9.54                                                                                     | 7.00                    |
| HRSPD125-472M         | 4.7                | 20                            | 100                | 0.014             | 7.29                                                                                     | 5.70                    |
| HRSPD125-682M         | 6.8                | 20                            | 100                | 0.017             | 6.53                                                                                     | 5.30                    |
| HRSPD125-103M         | 10                 | 20                            | 100                | 0.030             | 5.39                                                                                     | 4.00                    |
| HRSPD125-123M         | 12                 | 20                            | 100                | 0.034             | 4.96                                                                                     | 3.60                    |
| HRSPD125-153M         | 15                 | 20                            | 100                | 0.046             | 4.28                                                                                     | 3.10                    |
| HRSPD125-183M         | 18                 | 20                            | 100                | 0.052             | 4.00                                                                                     | 2.90                    |
| HRSPD125-223M         | 22                 | 20                            | 100                | 0.068             | 3.54                                                                                     | 2.50                    |
| HRSPD125-273M         | 27                 | 20                            | 100                | 0.078             | 3.18                                                                                     | 2.30                    |
| HRSPD125-333M         | 33                 | 20                            | 100                | 0.088             | 2.88                                                                                     | 2.20                    |
| HRSPD125-393M         | 39                 | 20                            | 100                | 0.110             | 2.64                                                                                     | 2.00                    |
| HRSPD125-473M         | 47                 | 20                            | 100                | 0.125             | 2.43                                                                                     | 1.90                    |
| HRSPD125-563M         | 56                 | 20                            | 100                | 0.140             | 2.25                                                                                     | 1.80                    |
| HRSPD125-683M         | 68                 | 20                            | 100                | 0.155             | 2.03                                                                                     | 1.70                    |
| HRSPD125-823M         | 82                 | 20                            | 100                | 0.175             | 1.85                                                                                     | 1.60                    |
| HRSPD125-104M         | 100                | 20                            | 10                 | 0.225             | 1.65                                                                                     | 1.40                    |
| HRSPD125-124M         | 120                | 20                            | 10                 | 0.260             | 1.53                                                                                     | 1.30                    |
| HRSPD125-154M         | 150                | 20                            | 10                 | 0.290             | 1.36                                                                                     | 1.20                    |
| HRSPD125-184M         | 180                | 20                            | 10                 | 0.330             | 1.25                                                                                     | 1.10                    |
| HRSPD125-224M         | 220                | 20                            | 10                 | 0.420             | 1.12                                                                                     | 1.00                    |
| HRSPD125-274M         | 270                | 20                            | 10                 | 0.480             | 1.01                                                                                     | 0.95                    |
| HRSPD125-334M         | 330                | 20                            | 10                 | 0.680             | 0.92                                                                                     | 0.80                    |
| HRSPD125-394M         | 390                | 20                            | 10                 | 0.900             | 0.84                                                                                     | 0.70                    |
| HRSPD125-474M         | 470                | 20                            | 10                 | 1.050             | 0.77                                                                                     | 0.65                    |
| HRSPD125-564M         | 560                | 20                            | 10                 | 1.250             | 0.71                                                                                     | 0.58                    |
| HRSPD125-684M         | 680                | 20                            | 10                 | 1.450             | 0.65                                                                                     | 0.55                    |
| HRSPD125-824M         | 820                | 20                            | 10                 | 1.800             | 0.58                                                                                     | 0.49                    |
| HRSPD125-105M         | 1000               | 20                            | 10                 | 2.200             | 0.53                                                                                     | 0.44                    |

**Custom Inductance Values Available – Consult Factory**

TESTING  
LEVEL 1TEMPERATURE  
RANGE -55/+130

# HRSPD125

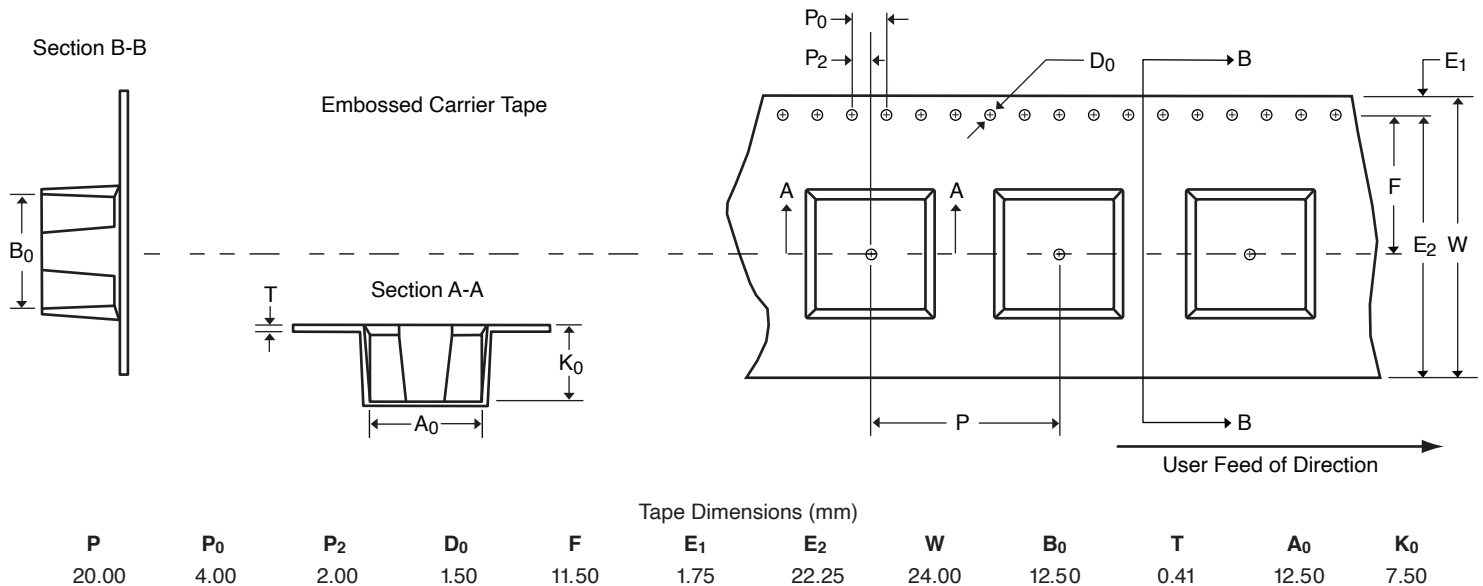
Shielded Surface Mount Inductors  
High Reliability Applications



Actual Size



## Tape and Reel Specifications



## Individual Part Marking

DELEVAN, Inductance Value, Date Code (YYWWL).

Part Marking Example: HRSPD125-473M

DELEVAN  
47uH  
1746

## How To Order

HRSPD125

—

473

M

Inductor Series

Dash Number

Tolerance

L = 15%  
K = 10%

# API Delevan®

270 Quaker Rd., East Aurora NY 14052 • Phone 716-652-3600 • E-mail: apisales@delevan.com • www.delevan.com

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10/9/2019

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|                                      |                                      |                                      |                                      |                                      |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| <a href="#"><u>HRSPD125-103M</u></a> | <a href="#"><u>HRSPD125-104M</u></a> | <a href="#"><u>HRSPD125-105M</u></a> | <a href="#"><u>HRSPD125-153M</u></a> | <a href="#"><u>HRSPD125-184M</u></a> | <a href="#"><u>HRSPD125-223M</u></a> |
| <a href="#"><u>HRSPD125-224M</u></a> | <a href="#"><u>HRSPD125-394M</u></a> | <a href="#"><u>HRSPD125-473M</u></a> | <a href="#"><u>HRSPD125-474M</u></a> | <a href="#"><u>HRSPD125-684M</u></a> | <a href="#"><u>HRSPD125-824M</u></a> |
| <a href="#"><u>HRSPD125-682M</u></a> | <a href="#"><u>HRSPD125-123M</u></a> | <a href="#"><u>HRSPD125-334M</u></a> | <a href="#"><u>HRSPD125-274M</u></a> | <a href="#"><u>HRSPD125-472M</u></a> | <a href="#"><u>HRSPD125-183M</u></a> |
| <a href="#"><u>HRSPD125-273M</u></a> | <a href="#"><u>HRSPD125-154M</u></a> | <a href="#"><u>HRSPD125-564M</u></a> | <a href="#"><u>HRSPD125-823M</u></a> | <a href="#"><u>HRSPD125-393M</u></a> | <a href="#"><u>HRSPD125-683M</u></a> |
| <a href="#"><u>HRSPD125-333M</u></a> | <a href="#"><u>HRSPD125-332M</u></a> | <a href="#"><u>HRSPD125-563M</u></a> | <a href="#"><u>HRSPD125-222M</u></a> | <a href="#"><u>HRSPD125-124M</u></a> |                                      |