

Part Number: 2743019447

43 SM BEAD

Explanation of Part Numbers:

- Digits 1 & 2 = Product Class
- Digits 3 & 4 = Material Grade
- Last digit 6 = Bulk Packed, 7 = Taped and Reeled

**Surface mount beads are available from Fair-Rite in several materials and sizes. Their rugged construction lowers the dc resistance and increases current carrying capacity compared to plated beads.**

Wires are oxygen free high conductivity copper with 100% matte tin plating over a nickel undercoating.

SM Beads meet the solderability specifications when tested in accordance with MIL-STD-202, method 208. After dipping the mounting site of the bead, the solder surface shall be at least 95% covered with a smooth solder coating. The edges of the copper strip are not specified as solderable surfaces.

After preheating the beads to within 100 °C of the soldering temperature, the parts meet the resistance to soldering requirements of EIA-186-10E, temperature  $260 \pm 5$  °C and time  $10 \pm 1$  seconds.

Recommended storage and operation temperature is -55 °C to 125 °C.

Our "Surface Mount Bead Kit" (part number 0199000025) is available for prototype evaluation.

[Recommended Soldering Profile](#)

Packaging Options:

- SM Beads on 12 mm tape width are supplied taped and reeled per EIA 481 and IEC 60286-3 standards. SM Beads on 16 and 24 mm tape widths are supplied taped and reeled per EIA 481 and IEC 60286-3 standards. Taped and reeled parts are supplied on a 13" reel.
- SM Beads can also be supplied not taped and reeled and then are bulk packed. This packing method will change the last digit of the part number to a "6".

**For any SM Bead requirement not listed, please contact our customer service group for availability and pricing.**

[Catalog Drawing](#)  
[3D Model](#)

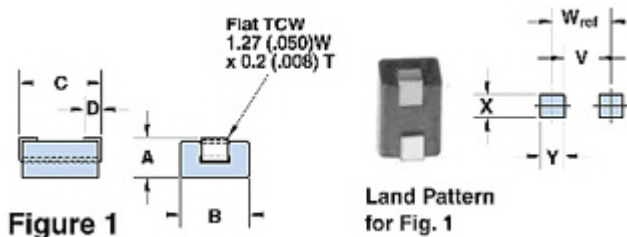
Suggested land patterns are in accordance with the latest revision of IPC-7351.

Weight: 0.15 (g)

| Dim | mm   | mm tol    | nominal inch | inch misc. |
|-----|------|-----------|--------------|------------|
| A   | 3.05 | Max. (mm) | 0.120        | Max        |
| B   | 3.05 | ±0.10     | 0.12         | —          |
| C   | 5.1  | Max (mm)  | 0.200 Max    | Max        |
| D   | 1.5  | ±0.50     | 0.059        | —          |

| Land Patterns    |                  |                  |                  |   |
|------------------|------------------|------------------|------------------|---|
| V                | W                | X                | Y                | Z |
| 1.00<br>(0.040") | 4.00<br>(0.157") | 1.80<br>(0.071") | 3.00<br>(0.118") | — |

| Reel Information |          |               |                |                |
|------------------|----------|---------------|----------------|----------------|
| Tape Width mm    | Pitch mm | Parts 7" Reel | Parts 13" Reel | Parts 14" Reel |
| 12               | 8        | --            | 2800           | --             |



### Chart Legend

+ Test frequency

| Typical Impedance (Ω) |    |
|-----------------------|----|
| 10 MHz                | 24 |
| 25 MHz <sup>+</sup>   | 37 |
| 100 MHz <sup>+</sup>  | 53 |
| 250 MHz               | 56 |

| Electrical Properties |     |
|-----------------------|-----|
| Max Rdc(mΩ)           | 0.8 |

SM Beads are controlled for impedance limits only. Minimum impedance values are specified for the + marked frequencies. The minimum impedance is listed on our catalog drawing.

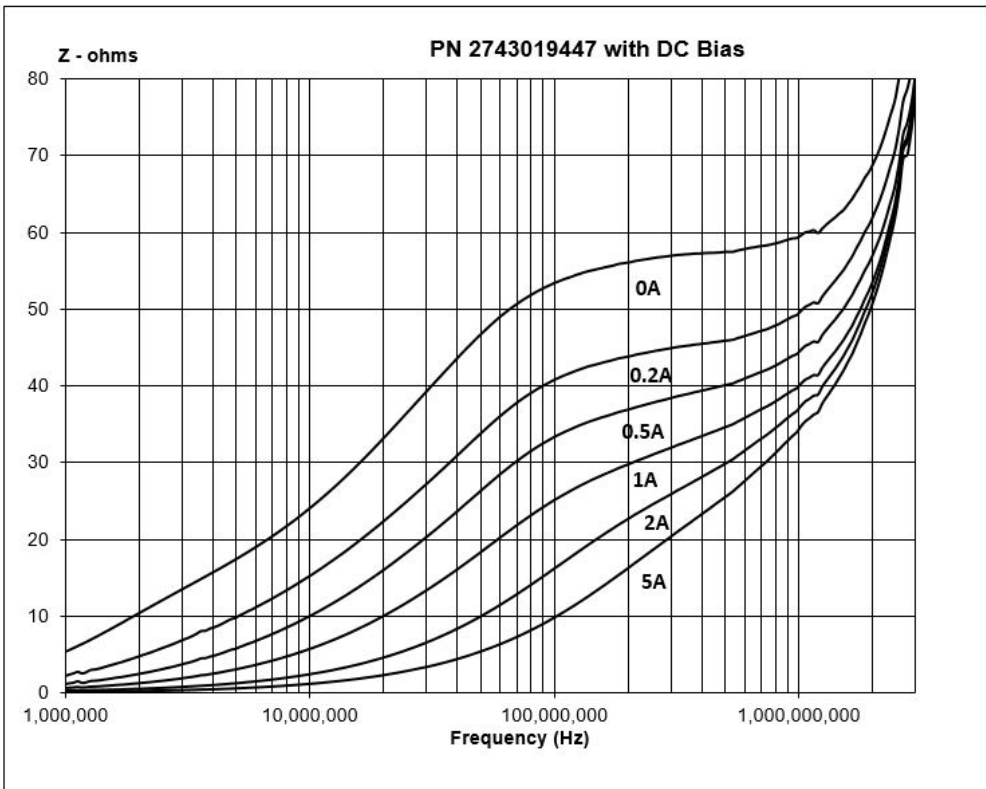
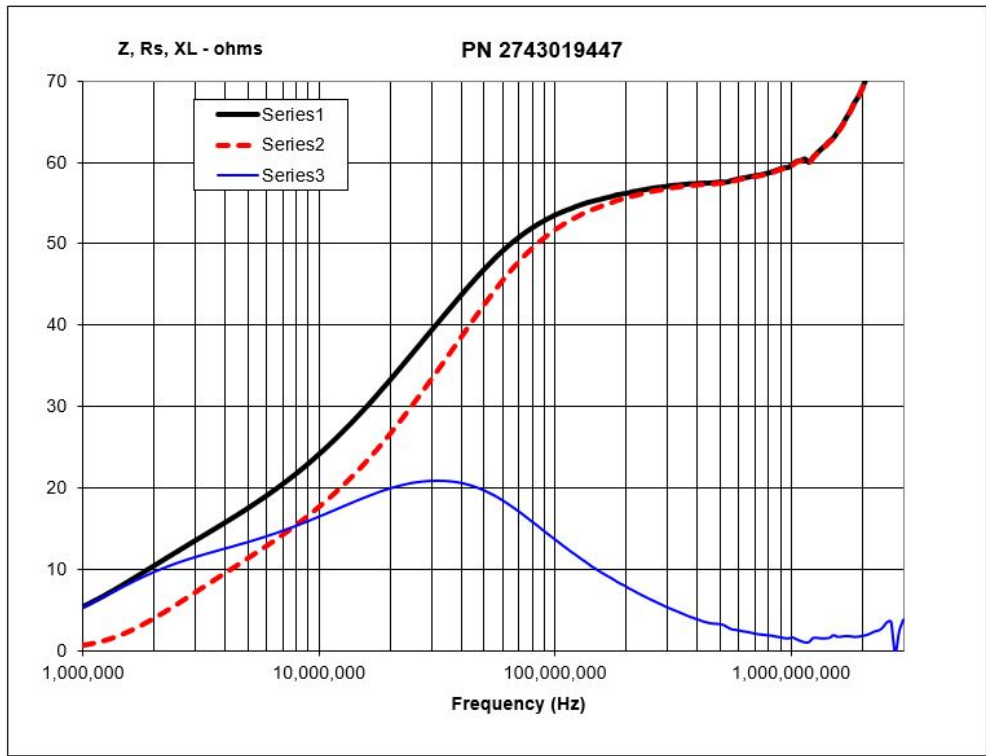
[Catalog Drawing](#)

SM Beads in 73 material are measured for impedance on the E4990A Impedance Analyzer. The 43, 43, 52 and 61 SM Beads are tested for impedance on the E4991A / HP4291B Impedance Analyzer. The minimum impedance is typically the listed value less 20%.

The maximum practical current rating for these SM Beads is 5 amps, check the component bias curves. The 019/021/037 and 044 SM Beads can withstand a continuous current of 10 amps resulting in a component temperature rise < 40 °C

| Typical Impedance (Ω) |    |
|-----------------------|----|
| 10 MHz                | 18 |
| 25 MHz <sup>+</sup>   | 29 |
| 100 MHz <sup>+</sup>  | 47 |

| Typical Impedance ( $\Omega$ ) |    |
|--------------------------------|----|
| 250 MHz                        | 49 |



[CSV Download](#)

