

**ER15M**

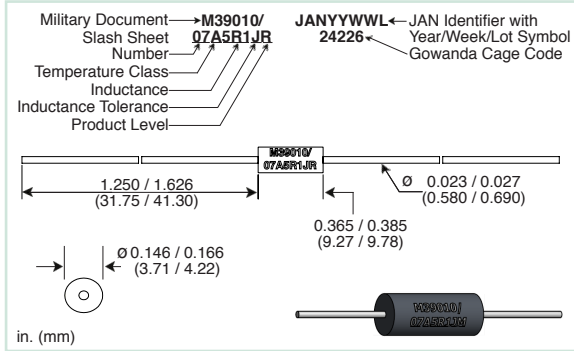


**Established Reliability**

**M39010 Level-R Molded Unshielded Inductor**

**Military Specifications:**

M39010/06, M39010/07



**NOTES:**

- **Operating Temperature Range:**  
Phenolic: -55°C to +125°C  
Iron: -55°C to +105°C
- **Temperature Class:**  
Phenolic: Class B (125°C)  
Iron: Class A (105°C)
- **Current Rating at 90°C Ambient:**  
Phenolic: 35°C Rise  
Iron: 15°C Rise
- **DWV 1000 Vrms @ Sea Level**  
300 Vrms @ 70,000 Feet
- **Weight:** 0.85 grams
- **Marking:** Laser Mark, 2 sided (see diagram above)
- Body color is black
- When ordering, specify **Tolerance and Product Level:**  
ER15M150JM  
**Tolerance:** M = 20%, K = 10%, J = 5%  
(Table shows available standard tolerance options)  
**Product Level: M, P, R**  
^ Substitute M, P or R
- When ordering by military part number, specify **Military Spec, Dash No., Tolerance & Product Level:**  
M39010/06BR15JM  
Example of ordering by Military Part Number:  
ER15M150JM → M39010/06BR15JM

**TAPE AND REEL SPECS:**

|                      |           |
|----------------------|-----------|
| Pcs./Reel maximum:   | 2500      |
| Pitch between parts: | 0.200 in. |
| Tape width:          | 2.062 in. |
| Reel diameter:       | 12 in.    |
| Class:               | 1         |

| PART NUMBER                         | MIL DASH No.       | L μH | IND TOL % | Q MIN | TEST FREQ MHz | SRF MHz MIN | DCR Ω MAX | CURRENT RATING mA DC |
|-------------------------------------|--------------------|------|-----------|-------|---------------|-------------|-----------|----------------------|
| <b>M39010/06 PHENOLIC CORE</b>      |                    |      |           |       |               |             |           |                      |
| ER15M150J <sup>A</sup>              | BR15J <sup>A</sup> | 0.15 | 5, 10, 20 | 50    | 25            | 525         | 0.030     | 2450                 |
| ER15M160J <sup>A</sup>              | BR16J <sup>A</sup> | 0.16 | 5         | 50    | 25            | 460         | 0.055     | 1810                 |
| ER15M180J <sup>A</sup>              | BR18J <sup>A</sup> | 0.18 | 5, 10     | 50    | 25            | 460         | 0.055     | 1810                 |
| ER15M200J <sup>A</sup>              | BR20J <sup>A</sup> | 0.20 | 5         | 50    | 25            | 460         | 0.055     | 1810                 |
| ER15M220J <sup>A</sup>              | BR22J <sup>A</sup> | 0.22 | 5, 10, 20 | 50    | 25            | 460         | 0.055     | 1810                 |
| ER15M240J <sup>A</sup>              | BR24J <sup>A</sup> | 0.24 | 5         | 45    | 25            | 360         | 0.090     | 1400                 |
| ER15M270J <sup>A</sup>              | BR27J <sup>A</sup> | 0.27 | 5, 10     | 45    | 25            | 360         | 0.090     | 1400                 |
| ER15M300J <sup>A</sup>              | BR30J <sup>A</sup> | 0.30 | 5         | 45    | 25            | 360         | 0.090     | 1400                 |
| ER15M330J <sup>A</sup>              | BR33J <sup>A</sup> | 0.33 | 5, 10, 20 | 45    | 25            | 360         | 0.090     | 1400                 |
| ER15M360J <sup>A</sup>              | BR36J <sup>A</sup> | 0.36 | 5         | 45    | 25            | 310         | 0.120     | 1225                 |
| ER15M390J <sup>A</sup>              | BR39J <sup>A</sup> | 0.39 | 5, 10     | 45    | 25            | 310         | 0.120     | 1225                 |
| ER15M430J <sup>A</sup>              | BR43J <sup>A</sup> | 0.43 | 5         | 45    | 25            | 310         | 0.120     | 1225                 |
| ER15M470J <sup>A</sup>              | BR47J <sup>A</sup> | 0.47 | 5, 10, 20 | 45    | 25            | 310         | 0.120     | 1225                 |
| ER15M510J <sup>A</sup>              | BR51J <sup>A</sup> | 0.51 | 5         | 45    | 25            | 280         | 0.135     | 1150                 |
| ER15M560J <sup>A</sup>              | BR56J <sup>A</sup> | 0.56 | 5, 10     | 50    | 25            | 280         | 0.135     | 1150                 |
| ER15M620J <sup>A</sup>              | BR62J <sup>A</sup> | 0.62 | 5         | 50    | 25            | 250         | 0.150     | 1100                 |
| ER15M680J <sup>A</sup>              | BR68J <sup>A</sup> | 0.68 | 5, 10     | 50    | 25            | 250         | 0.150     | 1100                 |
| ER15M750J <sup>A</sup>              | BR75J <sup>A</sup> | 0.75 | 5         | 50    | 25            | 220         | 0.220     | 900                  |
| ER15M820J <sup>A</sup>              | BR82J <sup>A</sup> | 0.82 | 5, 10     | 50    | 25            | 220         | 0.220     | 900                  |
| ER15M910J <sup>A</sup>              | BR91J <sup>A</sup> | 0.91 | 5         | 50    | 25            | 200         | 0.290     | 785                  |
| ER15M101J <sup>A</sup>              | B1R0J <sup>A</sup> | 1.0  | 5, 10     | 50    | 25            | 200         | 0.290     | 785                  |
| ER15M111J <sup>A</sup>              | B1R1J <sup>A</sup> | 1.1  | 5         | 33    | 7.9           | 180         | 0.420     | 650                  |
| ER15M121J <sup>A</sup>              | B1R2J <sup>A</sup> | 1.2  | 5, 10     | 33    | 7.9           | 180         | 0.420     | 650                  |
| ER15M131J <sup>A</sup>              | B1R3J <sup>A</sup> | 1.3  | 5         | 33    | 7.9           | 160         | 0.500     | 600                  |
| ER15M151J <sup>A</sup>              | B1R5J <sup>A</sup> | 1.5  | 5, 10     | 33    | 7.9           | 160         | 0.500     | 600                  |
| ER15M161J <sup>A</sup>              | B1R6J <sup>A</sup> | 1.6  | 5         | 33    | 7.9           | 150         | 0.650     | 525                  |
| ER15M181J <sup>A</sup>              | B1R8J <sup>A</sup> | 1.8  | 5, 10     | 33    | 7.9           | 150         | 0.650     | 525                  |
| ER15M201J <sup>A</sup>              | B2R0J <sup>A</sup> | 2.0  | 5         | 33    | 7.9           | 135         | 0.950     | 435                  |
| ER15M221J <sup>A</sup>              | B2R2J <sup>A</sup> | 2.2  | 5, 10     | 33    | 7.9           | 135         | 0.950     | 435                  |
| ER15M241J <sup>A</sup>              | B2R4J <sup>A</sup> | 2.4  | 5         | 33    | 7.9           | 120         | 1.2       | 385                  |
| ER15M271J <sup>A</sup>              | B2R7J <sup>A</sup> | 2.7  | 5, 10     | 33    | 7.9           | 120         | 1.2       | 385                  |
| ER15M301J <sup>A</sup>              | B3R0J <sup>A</sup> | 3.0  | 5         | 33    | 7.9           | 110         | 2.0       | 300                  |
| ER15M331J <sup>A</sup>              | B3R3J <sup>A</sup> | 3.3  | 5, 10     | 33    | 7.9           | 110         | 2.0       | 300                  |
| ER15M361J <sup>A</sup>              | B3R6J <sup>A</sup> | 3.6  | 5         | 33    | 7.9           | 100         | 2.3       | 280                  |
| ER15M391J <sup>A</sup>              | B3R9J <sup>A</sup> | 3.9  | 5, 10     | 33    | 7.9           | 100         | 2.3       | 280                  |
| ER15M431J <sup>A</sup>              | B4R3J <sup>A</sup> | 4.3  | 5         | 33    | 7.9           | 90          | 2.6       | 260                  |
| ER15M471J <sup>A</sup>              | B4R7J <sup>A</sup> | 4.7  | 5, 10     | 33    | 7.9           | 90          | 2.6       | 260                  |
| <b>M39010/07 POWDERED IRON CORE</b> |                    |      |           |       |               |             |           |                      |
| ER15M511J <sup>A</sup>              | A5R1J <sup>A</sup> | 5.1  | 5         | 45    | 7.9           | 60          | 0.32      | 495                  |
| ER15M561J <sup>A</sup>              | A5R6J <sup>A</sup> | 5.6  | 5, 10     | 45    | 7.9           | 60          | 0.32      | 495                  |
| ER15M621J <sup>A</sup>              | A6R2J <sup>A</sup> | 6.2  | 5         | 45    | 7.9           | 55          | 0.50      | 395                  |
| ER15M681J <sup>A</sup>              | A6R8J <sup>A</sup> | 6.8  | 5, 10     | 50    | 7.9           | 55          | 0.50      | 395                  |
| ER15M751J <sup>A</sup>              | A7R5J <sup>A</sup> | 7.5  | 5         | 50    | 7.9           | 50          | 0.60      | 360                  |
| ER15M821J <sup>A</sup>              | A8R2J <sup>A</sup> | 8.2  | 5, 10     | 50    | 7.9           | 50          | 0.60      | 360                  |
| ER15M911J <sup>A</sup>              | A9R1J <sup>A</sup> | 9.1  | 5         | 50    | 7.9           | 45          | 0.90      | 290                  |
| ER15M102J <sup>A</sup>              | A100J <sup>A</sup> | 10   | 5, 10     | 55    | 7.9           | 45          | 0.90      | 290                  |
| ER15M112J <sup>A</sup>              | A110J <sup>A</sup> | 11   | 5         | 55    | 2.5           | 42          | 1.10      | 265                  |
| ER15M122J <sup>A</sup>              | A120J <sup>A</sup> | 12   | 5, 10     | 65    | 2.5           | 42          | 1.10      | 265                  |
| ER15M132J <sup>A</sup>              | A130J <sup>A</sup> | 13   | 5         | 65    | 2.5           | 40          | 1.40      | 240                  |
| ER15M152J <sup>A</sup>              | A150J <sup>A</sup> | 15   | 5, 10     | 65    | 2.5           | 40          | 1.40      | 240                  |
| ER15M162J <sup>A</sup>              | A160J <sup>A</sup> | 16   | 5         | 65    | 2.5           | 34          | 2.25      | 185                  |
| ER15M182J <sup>A</sup>              | A180J <sup>A</sup> | 18   | 5, 10     | 75    | 2.5           | 34          | 2.25      | 185                  |
| ER15M202J <sup>A</sup>              | A200J <sup>A</sup> | 20   | 5         | 75    | 2.5           | 30          | 2.50      | 175                  |
| ER15M222J <sup>A</sup>              | A220J <sup>A</sup> | 22   | 5, 10     | 75    | 2.5           | 30          | 2.50      | 175                  |
| ER15M242J <sup>A</sup>              | A240J <sup>A</sup> | 24   | 5         | 60    | 2.5           | 25          | 2.60      | 170                  |
| ER15M272J <sup>A</sup>              | A270J <sup>A</sup> | 27   | 5, 10     | 60    | 2.5           | 25          | 2.60      | 170                  |
| ER15M302J <sup>A</sup>              | A300J <sup>A</sup> | 30   | 5         | 60    | 2.5           | 19          | 3.00      | 165                  |
| ER15M332J <sup>A</sup>              | A330J <sup>A</sup> | 33   | 5, 10     | 65    | 2.5           | 19          | 3.00      | 165                  |
| ER15M362J <sup>A</sup>              | A360J <sup>A</sup> | 36   | 5         | 60    | 2.5           | 15.5        | 2.50      | 180                  |
| ER15M392J <sup>A</sup>              | A390J <sup>A</sup> | 39   | 5         | 60    | 2.5           | 14.5        | 2.60      | 176                  |
| ER15M432J <sup>A</sup>              | A430J <sup>A</sup> | 43   | 5         | 60    | 2.5           | 13.7        | 2.70      | 172                  |

## ER15M



**Established Reliability**

*M39010 Molded Unshielded Inductor*

**Military Specifications:**

M39010/06, M39010/07

| PART NUMBER                         | MIL DASH NUMBER    | L $\mu$ H | IND TOL % | Q MIN | TEST FREQ MHz | SRF MHz MIN | DCR $\Omega$ MAX | CURRENT RATING mA DC |
|-------------------------------------|--------------------|-----------|-----------|-------|---------------|-------------|------------------|----------------------|
| <b>M39010/07 POWDERED IRON CORE</b> |                    |           |           |       |               |             |                  |                      |
| ER15M472J <sup>^</sup>              | A470J <sup>^</sup> | 47        | 5         | 55    | 2.5           | 13.0        | 2.75             | 170                  |
| ER15M512J <sup>^</sup>              | A510J <sup>^</sup> | 51        | 5         | 55    | 2.5           | 12.7        | 2.85             | 167                  |
| ER15M562J <sup>^</sup>              | A560J <sup>^</sup> | 56        | 5         | 55    | 2.5           | 12.0        | 3.00             | 164                  |
| ER15M622J <sup>^</sup>              | A620J <sup>^</sup> | 62        | 5         | 55    | 2.5           | 11.5        | 3.15             | 160                  |
| ER15M682J <sup>^</sup>              | A680J <sup>^</sup> | 68        | 5         | 55    | 2.5           | 11.0        | 3.30             | 156                  |
| ER15M752J <sup>^</sup>              | A750J <sup>^</sup> | 75        | 5         | 55    | 2.5           | 10.5        | 3.70             | 147                  |
| ER15M822J <sup>^</sup>              | A820J <sup>^</sup> | 122       | 5         | 50    | 2.5           | 10.3        | 3.90             | 143                  |
| ER15M912J <sup>^</sup>              | A910J <sup>^</sup> | 91        | 5         | 50    | 2.5           | 10.0        | 4.30             | 136                  |
| ER15M103J <sup>^</sup>              | A101J <sup>^</sup> | 100       | 5         | 50    | 2.5           | 9.5         | 4.50             | 133                  |
| ER15M113J <sup>^</sup>              | A111J <sup>^</sup> | 110       | 5         | 60    | 0.79          | 8.9         | 4.90             | 128                  |
| ER15M123J <sup>^</sup>              | A121J <sup>^</sup> | 120       | 5         | 65    | 0.79          | 8.7         | 5.20             | 124                  |
| ER15M133J <sup>^</sup>              | A131J <sup>^</sup> | 130       | 5         | 65    | 0.79          | 8.5         | 5.45             | 121                  |
| ER15M153J <sup>^</sup>              | A151J <sup>^</sup> | 150       | 5         | 65    | 0.79          | 8.0         | 6.05             | 114                  |
| ER15M163J <sup>^</sup>              | A161J <sup>^</sup> | 160       | 5         | 65    | 0.79          | 7.5         | 6.40             | 111                  |
| ER15M183J <sup>^</sup>              | A181J <sup>^</sup> | 180       | 5         | 65    | 0.79          | 7.0         | 6.75             | 108                  |
| ER15M203J <sup>^</sup>              | A201J <sup>^</sup> | 200       | 5         | 65    | 0.79          | 6.5         | 7.10             | 106                  |
| ER15M223J <sup>^</sup>              | A221J <sup>^</sup> | 220       | 5         | 65    | 0.79          | 6.2         | 7.45             | 103                  |
| ER15M243J <sup>^</sup>              | A241J <sup>^</sup> | 240       | 5         | 65    | 0.79          | 5.9         | 7.80             | 101                  |