



Ferrite Material Status Sheet

3/3/2003

- 3B** - Old name for 3B1. No longer available under this name.
- 3B1** - Old low frequency EMI suppression material. No longer available in beads and chokes, but still available in rods and tubes. 3S4 is the recommended replacement for beads and chokes.
- 3B7** - Old signal and filter material. Still available. Best material for temperature stability. Not recommended for new designs, unless temperature stability is required. 3H3 is the recommended alternative.
- 3B9** - Old filter material. No longer available. Has been replaced mostly by 3H1, but 3H3 is recommended for new designs.
- 3C6A** - Old power material, no longer available. Name later changed to 3C80. 3C90 is the recommended replacement.
- 3C8** - Old power material. Name later changed to 3C81, which is still available.
- 3C11** - Medium perm material. Only available in toroids.
- 3C30** - Low frequency power material. Available only in UR cores and IIC.
- 3C80** - Old power material, no longer available. 3C90 is the recommended replacement.
- 3C81** - Old low temperature power and general purpose material. Still available. 3C90 and 3C91 are recommended upgrades, depending on temperature.
- 3C85** - Old power material, still available in some shapes, but not toroids. Not recommended for new designs. 3C90 is the recommended replacement.
- 3C90** - Standard low frequency (up to 250 KHz) power material. Better power losses than 3C85. Alternative to 3F3 at low frequencies. Can be upgraded to 3C94 for even lower losses.
- 3C91** - New low-loss, low temperature power material. Recommended as a possible upgrade from 3C81.
- 3C92** - New low-loss, high saturation power material. Recommended for gapped cores for power choke applications. Now available in most shapes.
- 3C93** - New high temperature power material. Recommended for automotive and lighting applications. Not yet available in some shapes.
- 3C94** - Low-loss, low frequency (up to 300 KHz) power material. Upgrade from 3C90 or possibly 3F3 (under certain conditions).
- 3C96** - New low-loss, low frequency (up to 400 KHz) power material. Upgrade from 3C90 or possibly 3F3 (under certain conditions). Not yet available in some shapes. Better than 3C94 at high temperatures (~90C).
- 3D3** - Old high frequency signal material. Still available. No real alternative for this material.
- 3E2A** - Old high perm material. No longer available. Replaced by 3E27.
- 3E5** - Old high perm material. Still available. 3E6 is recommended for new designs.
- 3E6** - High perm material. Recently re-formulated to improve performance. Recommended for new designs.
- 3E7** - Very high perm material. Limited availability, small toroids only.
- 3E8** - New very high perm material. Limited availability, small toroids only.
- 3E9** - New very high perm material. Limited availability, small toroids only.
- 3E25** - Old high perm material. Still available, but not recommended for new designs. 3E27 is the recommended replacement.
- 3E26** - High perm material. Available in some medium E & U cores and toroids.
- 3E27** - High perm material. Replaced 3E2A. Recommended as an upgrade from 3E25.
- 3E28** - High perm material. Recommended for low-power signal applications with a small DC bias.
- 3E55** - New high perm, low THD material for DSL applications. Limited availability.
- 3F3** - Old high frequency power material. Still available. Formerly our best power material, but new materials may have better performance (depends on conditions). 3C94 is better at low frequencies, 3F35 is better at higher frequencies. Recommended for frequencies from 200 KHz to 700 KHz.
- 3F35** - New low-loss high frequency power material. Not yet available in most shapes. Upgrade from 3F3 for frequencies from 500 KHz to 700 KHz.
- 3F4** - High frequency power material. Recommended for frequencies from 700 KHz to 2 MHz.

3F45 – High frequency power material. Upgrade from 3F4 for same frequency range. Will be available in mid 2003.

3F5 – High frequency power material. Recommended for frequencies from 2 MHz to 4 MHz. Will be available in mid 2003.

3H1 - Old filter material. Still available. Previously replaced 3B9. Not recommended for new designs. 3H3 is the recommended replacement.

3H3 - New signal and filter material. Improved loss factor. Recommended as an upgrade from 3B7 or 3H1.

3R1 - Unique square loop material. Recommended for magnetic amplifier (mag amp) applications. No alternative.

3S1 - Low frequency EMI suppression material. Available mostly in beads.

3S3 - EMI suppression material. Recommended for high bias applications. Available mostly in rods.

3S4 - General EMI suppression material. Replaced most 3B1 parts. Available in most EMI shapes.

4A11 – High frequency EMI suppression and signal material. Available mostly in toroids & special beads.

4A15 - EMI Suppression material. Available in some wideband chokes and cable shields.

4B - Old name for 4B1 material. No longer available under this name.

4B1 - High frequency EMI suppression and RF tuning material. Available mostly in rods, tubes, chokes, and multi-hole beads.

4C4 - Old high frequency (RF) signal material. No longer available. 4C6 or 4C65 are the recommended replacements.

4C6 - Old high frequency (RF) signal material. Still available in pot cores and RM cores. Replacement for 4C4 in these shapes. Not recommended for new designs.

4C65 - Old high frequency (RF) signal material. Still available in toroids. Replacement for 4C4 in this shape.

4D2 – Low perm, high frequency (RF) material. Available mostly in rods.

4E1- Low perm, high frequency (RF) material. Available mostly in rods.

4F1 - Very high frequency power material. Available only by special request.

4S2 - High frequency EMI suppression material. Available in most EMI shapes.

4S4 - High frequency EMI suppression material. Available only in multilayer suppressors.

4S7 - High frequency EMI suppression material. Available only in multilayer suppressors.