

EMI Suppression

Ferrites for Cables and Connectors

SPLIT FERRITE CORES FOR ROUND CABLES

Ambient Temperature Range: -55 ° C to +125 ° C

| Part No. | Package Size | Impedance (Z) Typical Ohms @ | | Cable Diameter (mm) | Steward Solid Core Equivalent | Height (mm) | Width (mm) | Length (mm) |
|-----------------------------|--------------|---------------------------------|--------|------------------------|----------------------------------|----------------|---------------|----------------|
| | | 100MHz | 300MHz | | | | | |
| 25A0392-0A | 0392 | | 180 | 2.67 - 4.57 | 25B0375-300 | 12.80 | 5.30 | 29.30 |
| 28A0392-0A | 0392 | 130 | | 2.67 - 4.57 | 28B0375-300 | 12.80 | 5.30 | 29.30 |
| 25A0393-0A | 0393 | | 180 | 2.67 - 4.57 | 25B0375-300 | 12.24 | 5.59 | 25.02 |
| 28A0393-0A | 0393 | 130 | | 2.67 - 4.57 | 28B0375-300 | 12.24 | 5.59 | 25.02 |
| 25A0640-0A | 0640 | | 238 | 8.38 - 8.89 | 25B0631-100 | 20.83 | 9.02 | 40.38 |
| 28A0640-0A | 0640 | 200 | | 8.38 - 8.89 | 28B0631-100 | 20.83 | 9.02 | 40.38 |
| 25A2024-0A | 2024 | | 285 | 9.53 - 12.70 | 25B1020-100 | 29.00 | 13.00 | 32.50 |
| 28A2024-0A | 2024 | 240 | | 9.53 - 12.70 | 28B1020-100 | 29.00 | 13.00 | 32.50 |
| 25A2025-0A | 2025 | | 331 | 5.08 - 6.35 | 25B0562-200 | 17.90 | 7.00 | 32.50 |
| 28A2025-0A | 2025 | 279 | | 5.08 - 6.35 | 28B0562-200 | 17.90 | 7.00 | 32.50 |
| 25A2026-0A | 2026 | | 331 | 5.08 - 6.35 | 25B0562-200 | 20.96 | 6.76 | 41.68 |
| 28A2026-0A | 2026 | 279 | | 5.08 - 6.35 | 28B0562-200 | 20.96 | 6.76 | 41.68 |
| 25A2029-0A | 2029 | | 300 | 7.62 - 10.16 | 25B0735-000 | 21.50 | 10.00 | 32.50 |
| 28A2029-0A | 2029 | 209 | | 7.62 - 10.16 | 28B0735-000 | 21.50 | 10.00 | 32.50 |
| 25B0562-3A2 | 0562 | | 330 | 4.32 - 5.08 | 25B0562-300 | 17.32 | 7.62 | 56.54 |
| 28B0562-3A2 | 0562 | 275 | | 4.32 - 5.08 | 28B0562-300 | 17.32 | 7.62 | 56.54 |

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Split Ferrite Cores For Round Cables



For retrofit and post-assembly operations, Steward offers a selection of "split" components. Similar in performance to Steward's one piece core designs, these split ferrite cores provide excellent common and differential mode EMI suppression on round cable assemblies. Lightweight, inexpensive plastic snap-on cases provide secure closure of the split cores onto the cable.

Features:

- Internal core diameters from 5.0mm (0.197") to 13.0mm (0.51") radius
- Precision formed smooth surfaces prevent damage to wire insulation
- Available in Steward broad band (28) or high frequency (25) materials
- Custom designs available
- Plastic cases are UL 94V-0 flame retardant rated
- Saves valuable PC board space
- The in-circuit impedance may be substantially increased by passing 2 turns of the wire conductor through the ferrite core assembly
- Easy installation

Applications:

- Internal and external power cables
- Internal cables between PC boards and data connectors
- Products with limited PC board space available for surface mount EMI components
- Monitor cables
- Power supply cables
- Printer cables

Test Specifications:

- HP4396A Network/Spectrum Analyzer
- HP43961A Impedance Test Kit
- HP16192A Test Fixture
- HP16200A DC Bias Adapter
- Philips PM2811 DC Power Supply
- Ambient Temperature 23.5°C
- Bandwidth 3 kHz
- Sweep Time 423 ms

PART NUMBERING SYSTEM

| | | | | | | |
|---------------|--------------|----------------|---|----------------|--------------------|--------------------------------------|
| <u>25</u> | <u>A</u> | <u>0392</u> | - | <u>0</u> | <u>A</u> | <u>2 (Black)</u> <u>0 (White)</u> |
| MATERIAL TYPE | PRODUCT CODE | PART SIZE CODE | | DIMENSION CODE | ASSEMBLY TYPE CODE | CASE COLOR CODE |

Broad band material is 28
High frequency material is 25

| PART NUMBER | Fig # | A mm (inches) | B mm (inches) | C mm (inches) | D mm (inches) | Cable Diameter Reference mm (inches) | Steward Solid Core Equivalent # | Typical Impedance (Ohms) | |
|---------------------------|-------|---------------|---------------|----------------|---------------|--------------------------------------|---------------------------------|--------------------------|-----------------------|
| | | | | | | | | 25 Material @ 300 MHz | 28 Material @ 100 MHz |
| --_A0392-0A_ | 1 | 12.80 (0.504) | 5.30 (0.209) | 29.30 (1.154) | 12.40 (0.488) | 2.67 - 4.57 (0.105 - 0.180) | --_B0375-300 | 180 | 130 |
| --_A0393-0A_ | 2 | 12.24 (0.482) | 5.59 (0.220) | 25.02 (0.985) | 10.06 (0.396) | 2.67 - 4.57 (0.105 - 0.180) | --_B0375-300 | 180 | 130 |
| --_A0640-0A_ | 1 | 20.83 (0.82) | 9.02 (0.355) | 40.38 (1.59) | 19.18 (0.755) | 8.38 - 8.89 (0.330 - 0.350) | --_B0631-100 | 238 | 200 |
| --_A2024-0A_ | 3 | 29.00 (1.140) | 13.00 (0.510) | 32.50 (1.280) | 29.60 (1.170) | 9.53 - 12.70 (0.375 - 0.500) | --_B1020-100 | 285 | 240 |
| --_A2025-0A_ | 3 | 17.90 (0.700) | 7.00 (0.280) | 32.50 (1.280) | 18.40 (0.720) | 5.08 - 6.35 (0.200 - 0.250) | --_B0562-200 | 331 | 279 |
| --_A2026-0A_ | 1 | 20.96 (0.825) | 6.76 (0.266) | 41.680 (1.641) | 20.32 (0.800) | 5.08 - 6.35 (0.200 - 0.250) | --_B0562-200 | 331 | 279 |
| --_A2029-0A_ | 3 | 21.50 (0.850) | 10.00 (0.390) | 32.50 (1.280) | 22.30 (0.880) | 7.62 - 10.16 (0.300 - 0.400) | --_B0735-000 | 300 | 209 |
| --_B0562-3A2 (solid core) | 4 | 17.32 (0.682) | 7.62 (0.300) | 56.54 (2.226) | 5.00 (0.200) | 4.32 - 5.08 (0.170 - 0.200) | --_B0562-300 | 330 | 275 |

- 0A0 = White Plastic Snap On Case
- 0A2 = Black Plastic Snap On Case

All impedance values are NET; they are based on the ferrite cores only.

