

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.

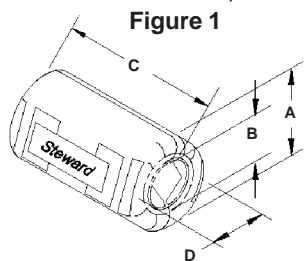


Figure 1

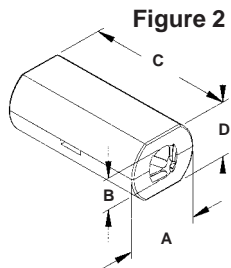


Figure 2

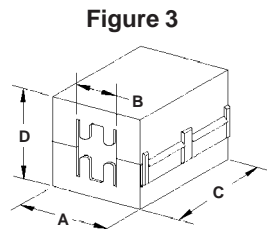


Figure 3

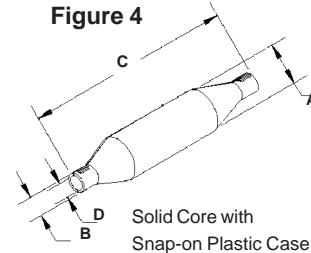


Figure 4

Solid Core with Snap-on Plastic Case