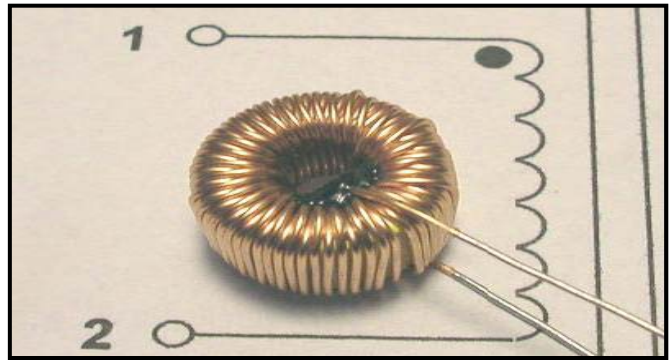


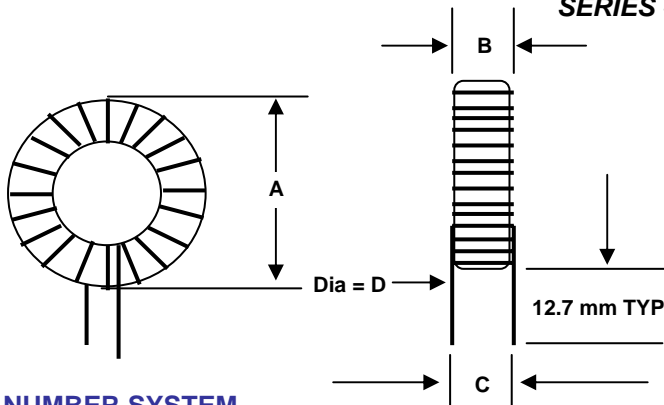


**MSR  
Electronics**



**HIGH TEMP TOROID POWER INDUCTORS - Vertical/Self Leaded  
SERIES - MPHVS**

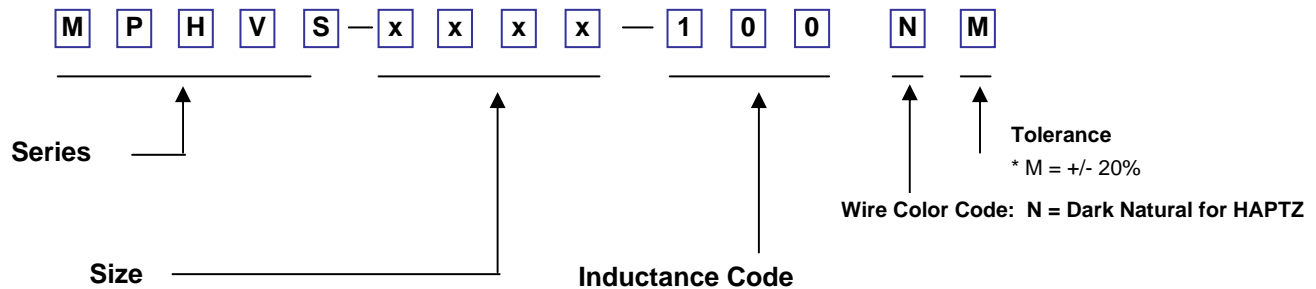
**RoHS**  
Compliant: Contact  
Factory for Copy of  
Test Report

**FEATURES**

- Uses High Temp Powder Iron Cores
- Meets UL Class H
- For use for Filters, Buck and Boost switches, or Chokes.
- Storage Temp = -40 to +105 °C
- Operating Temp = -40 to +200 °C
- Wire is 200 degree HAPTZ
- Dimensions in (mm)

**PART NUMBER SYSTEM**



Part Number	Inductance L(uH) 1KHz@ 1V	DCR ( ohms ) Max	I dc Amps	Inductance L(uH) @ I rated	Dimensions (mm)			
					A TYP	B TYP	C TYP	D TYP
MPHVS-2212-100NM	10	0.007	10.8	6.3	22	12	8.7	1.35
MPHVS-2414-100NM	10	0.008	12.5	6.7	24	14	11.7	1.35
MPHVS-3317-100NM	10	0.005	20.0	6.7	33	17	14.3	1.68
MPHVS-2212-120NM	12	0.012	10.3	7.4	22	12	8.7	1.20
MPHVS-2414-120NM	12	0.008	12.0	7.9	24	12	11.7	1.35
MPHVS-3317-120NM	12	0.006	19.1	7.8	33	17	14.2	1.68
MPHVS-2212-150NM	15	0.013	7.7	10.2	22	12	8.4	1.20
MPHVS-2414-150NM	15	0.009	11.3	9.6	24	14	11.7	1.35
MPHVS-3317-150NM	15	0.006	18.0	9.5	33	17	14.2	1.68
MPHVS-2212-180NM	18	0.020	7.4	11.9	22	12	8.4	1.07
MPHVS-2414-180NM	18	0.010	10.3	11.3	24	14	11.7	1.35
MPHVS-3317-180NM	18	0.007	17.2	11.1	33	17	14.2	1.68

Part Number	Inductance L(uH) 1KHz@ 1V	DCR ( ohms ) Max	I dc Amps	Inductance L(uH) @ I rated	Dimensions (mm)			
					A TYP	B TYP	C TYP	D TYP
MPHVS-2212-220NM	22	0.026	7.0	14.2	22	12	8.4	1.07
MPHVS-2414-220NM	22	0.011	10.3	13.4	24	14	11.7	1.35
MPHVS-3317-220NM	22	0.008	16.4	13.2	33	17	14.2	1.68
MPHVS-2212-270NM	27	0.029	5.3	19.1	22	12	8.3	1.07
MPHVS-2414-270NM	27	0.020	9.8	16.0	24	14	11.5	1.20
MPHVS-3317-270NM	27	0.013	15.6	15.7	33	17	14.2	1.35
MPHVS-2212-330NM	33	0.032	5.0	22.8	22	12	8.4	0.87
MPHVS-2414-330NM	33	0.022	7.4	21.6	24	14	11.5	1.20
MPHVS-3317-330NM	33	0.014	11.7	21.3	33	17	13.5	1.35
MPHVS-2212-390NM	39	0.055	4.8	26.4	22	12	8.4	0.87
MPHVS-2414-390NM	39	0.024	7.1	25.0	24	14	11.5	1.20
MPHVS-3317-390NM	39	0.016	11.2	24.7	33	17	13.5	1.35
MPHVS-2212-470NM	47	0.060	3.6	34.7	22	12	7.9	0.87
MPHVS-2414-470NM	47	0.026	6.7	29.3	24	14	11.5	1.20
MPHVS-3317-470NM	47	0.017	10.7	29.0	33	17	13.5	1.35
MPHVS-2212-560NM	56	0.080	3.4	40.6	22	12	7.9	0.69
MPHVS-2414-560NM	56	0.046	6.4	34.1	24	14	11.2	1.07
MPHVS-3317-560NM	56	0.030	10.2	33.7	33	17	13.5	1.20
MPHVS-2212-680NM	68	0.100	3.3	48.3	22	12	7.9	0.56
MPHVS-2414-680NM	68	0.056	4.9	45.7	24	14	11.2	1.07
MPHVS-3317-680NM	68	0.037	7.7	45.2	33	17	13.2	1.20
MPHVS-2212-101NM	100	0.110	2.4	75.2	22	12	7.9	0.56
MPHVS-2414-101NM	100	0.098	4.4	64.0	24	14	11.2	0.87
MPHVS-3317-101NM	100	0.040	7.0	63.1	33	17	13.2	1.20
MPHVS-2212-121NM	120	0.130	2.2	88.5	22	12	7.9	0.56
MPHVS-2414-121NM	120	0.110	3.8	84.4	24	14	11.2	0.87
MPHVS-3317-121NM	120	0.071	6.7	73.9	33	17	13.2	1.07
MPHVS-2212-151NM	150	0.150	2.2	84.3	22	12	8.9	0.56
MPHVS-2414-151NM	150	0.075	3.5	102.7	24	14	11.2	1.07
MPHVS-3317-151NM	150	0.078	5.0	101.4	33	17	13.0	1.07
MPHVS-2212-181NM	180	0.170	2.2	113.1	22	12	8.7	0.56
MPHVS-2414-181NM	180	0.083	3.4	105.9	24	14	12.2	1.07
MPHVS-3317-181NM	180	0.054	5.8	118.9	33	17	13.0	1.20
MPHVS-2212-221NM	220	0.190	2.2	134.4	22	12	8.7	0.56
MPHVS-2414-221NM	220	0.092	3.3	125.5	24	14	12.2	1.07
MPHVS-3317-221NM	220	0.060	5.6	123.8	33	17	14.2	1.20
MPHVS-2212-271NM	270	0.230	1.8	181.6	22	12	8.4	0.56
MPHVS-2414-271NM	270	0.100	3.2	149.2	24	14	12.2	1.07
MPHVS-3317-271NM	270	0.067	5.5	147.2	33	17	14.2	1.20
MPHVS-2212-331NM	330	0.250	1.7	216.3	22	12	8.4	0.56
MPHVS-2414-331NM	330	0.180	3.1	176.8	24	14	11.5	0.87
MPHVS-3317-331NM	330	0.072	5.2	174.1	33	17	14.2	1.20
MPHVS-2212-391NM	390	0.280	1.6	250.1	22	12	8.4	0.56
MPHVS-2414-391NM	390	0.190	2.5	235.3	24	14	11.5	0.87
MPHVS-3317-391NM	390	0.130	5.0	200.2	33	17	14.2	1.07
MPHVS-2212-471NM	470	0.300	1.5	293.8	22	12	8.9	0.56
MPHVS-2414-471NM	470	0.210	2.3	275.9	24	14	11.7	0.87
MPHVS-3317-471NM	470	0.140	3.8	271.4	33	17	13.7	1.07
MPHVS-2212-561NM	560	0.330	1.4	341.5	22	12	8.9	0.56
MPHVS-2414-561NM	560	0.230	2.2	320.1	24	14	11.7	0.87
MPHVS-3317-561NM	560	0.150	3.6	314.8	33	17	13.7	1.07
MPHVS-2212-681NM	680	0.370	1.4	403.2	22	12	8.9	0.56
MPHVS-2414-681NM	680	0.260	2.1	377.2	24	14	12.5	0.87
MPHVS-3317-681NM	680	0.270	3.4	370.7	33	17	13.7	1.07

Part Number	Inductance L(uH) 1KHz@ 1V	DCR ( ohms ) Max	I dc Amps	Inductance L(uH) @ I rated	Dimensions (mm)			
					A TYP	B TYP	C TYP	D TYP
MPHVS-2212-821NM	820	0.400	1.3	472.8	22	12	8.9	0.56
MPHVS-2414-821NM	820	0.280	2.0	441.5	24	14	12.4	0.87
MPHVS-3317-821NM	820	0.300	2.6	500.9	33	17	13.5	1.07
MPHVS-2212-102NM	1000	0.460	1.3	559.2	22	12	9.4	0.56
MPHVS-2414-102NM	1000	0.320	1.9	521.3	24	12	12.4	0.87
MPHVS-3317-102NM	1000	0.350	2.4	593.6	33	17	13.5	1.07

## HOLE PATTERN



Refer to item "C"