



SRFB SERIES

HIGH RELIABILITY FERRITE BEADS



ALL PARTS AVAILABLE AS CLASS S OR CLASS B

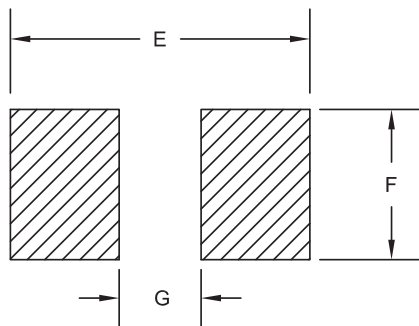
MIL-STD-981

ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to $+130^{\circ}\text{C}$
- **Storage Temperature:** -55°C to $+130^{\circ}\text{C}$
- **Impedance tolerances available:**
 $\pm 25\%$, $\pm 20\%$, $\pm 10\%$, $\pm 5\%$
 (Consult factory for 5% and 10% availability)
- **Closed, linear magnetic path to avoid crosstalk**
- **NASA outgassing compliant per ASTM E595**
 (TML $<1\%$, CVCM $<0.1\%$)

FEATURES

- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-STD-981**
- **Terminations:** Tin-lead (over nickel)
- **Surface Mount Technology**
- **Moisture, Shock and Immersion Resistant**
- **Resistance to Soldering Heat:** 265°C for 10 secs

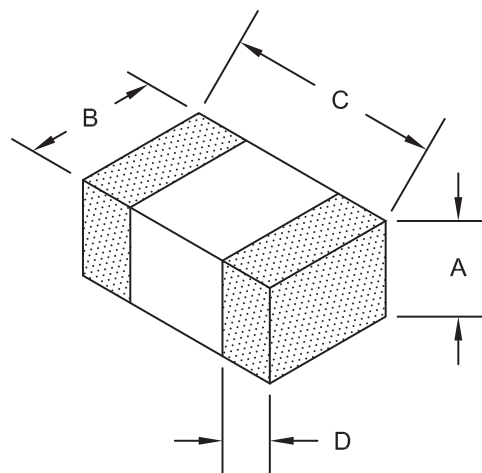
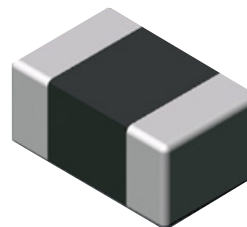


RECOMMENDED PAD LAYOUT

Package	E	F	G
0603	0.102 (2.60)	0.031 (0.80)	0.023 (0.60)
0805	0.118 (3.00)	0.039 (1.00)	0.039 (1.00)
1206	0.173 (4.40)	0.055 (1.40)	0.086 (2.20)

Dimensions are in inches (mm).

Impedance (Ω)	DCR max (Ω)	Current Rating max (A)
10 to 2000	0.055 to 1.5	0.1 to 10



Package	A	B	C	D
0603	0.031 ± 0.006 (0.80 ± 0.15)	0.031 ± 0.006 (0.80 ± 0.15)	0.063 ± 0.006 (1.6 ± 0.15)	0.014 ± 0.006 (0.36 ± 0.15)
0805	0.035 ± 0.008 (0.89 ± 0.20)	0.049 ± 0.008 (1.24 ± 0.20)	0.079 ± 0.008 (2.01 ± 0.20)	0.020 ± 0.010 (0.51 ± 0.25)
1206	0.043 ± 0.008 (1.09 ± 0.20)	0.063 ± 0.008 (1.6 ± 0.20)	0.126 ± 0.008 (3.2 ± 0.20)	0.020 ± 0.010 (0.51 ± 0.25)

Dimensions are in inches (mm).

SRFB SERIES





DATA TABLE

Vanguard P/N	Impedance* (Ω)	DCR max (Ω)	Current Rating max (A)	Package
SRFB0603-300**-**	30	0.15	0.50	0603
SRFB0603-600**-**	60	0.15	0.50	0603
SRFB0603-101**-**	100	0.20	0.40	0603
SRFB0603-151**-**	150	0.25	0.40	0603
SRFB0603-181**-**	180	0.25	0.40	0603
SRFB0603-301**-**	300	0.30	0.20	0603
SRFB0603-401**-**	400	0.35	0.20	0603
SRFB0603-601**-**	600	0.40	0.20	0603
SRFB0603-102**-**	1000	0.60	0.20	0603
SRFB0805-300**-**	30	0.02	4.00	0805
SRFB0805-500**-**	50	0.08	2.00	0805
SRFB0805-600**-**	60	0.15	1.50	0805
SRFB0805-700**-**	70	0.15	1.50	0805
SRFB0805-101**-**	100	0.20	1.00	0805
SRFB0805-121**-**	120	0.20	1.00	0805
SRFB0805-151**-**	150	0.20	1.00	0805
SRFB0805-221**-**	220	0.20	1.00	0805
SRFB0805-331**-**	330	0.25	1.00	0805
SRFB0805-471**-**	470	0.25	1.00	0805
SRFB0805-601**-**	600	0.30	1.00	0805
SRFB0805-102**-**	1000	0.40	1.00	0805
SRFB1206-300**-**	30	0.01	4.00	1206
SRFB1206-500**-**	50	0.03	3.00	1206
SRFB1206-800**-**	80	0.10	1.50	1206
SRFB1206-121**-**	120	0.10	1.50	1206
SRFB1206-251**-**	250	0.10	1.50	1206
SRFB1206-501**-**	500	0.20	1.00	1206
SRFB1206-601**-**	600	0.30	1.00	1206

* Impedance measured at 100 MHz

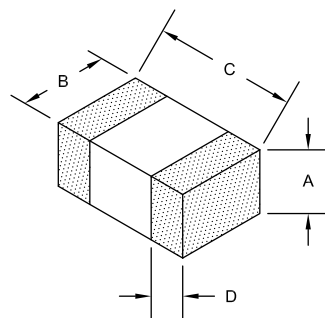
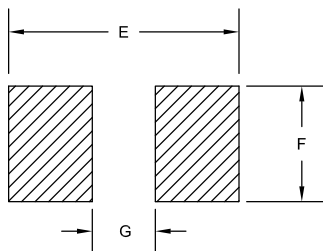
SRFB SERIES





ADDITIONAL VALUES AND RATINGS

RECOMMENDED PAD LAYOUT



Package	E	F	G
0402A	0.087 (2.20)	0.028 (0.70)	0.016 (0.40)
0603A	0.110 (2.80)	0.039 (1.00)	0.024 (0.60)
0805A	0.126 (3.20)	0.059 (1.50)	0.024 (0.60)
1206A	0.173 (4.40)	0.071 (1.80)	0.047 (1.20)
1806A	0.229 (5.82)	0.071 (1.80)	0.079 (2.00)
1812A	0.229 (5.82)	0.134 (3.40)	0.079 (2.00)
1813A	0.228 (5.80)	0.134 (3.40)	0.079 (2.00)
2218A	0.362 (9.20)	0.220 (5.60)	0.118 (3.00)
2219A	0.362 (9.20)	0.220 (5.60)	0.118 (3.00)
2220A	0.362 (9.20)	0.220 (5.60)	0.118 (3.00)
3312A	0.519 (13.20)	0.134 (3.40)	0.236 (6.00)

Dimensions are in inches (mm).

Package	A	B	C	D
0402A	0.020 ± 0.002 (0.50 ± 0.05)	0.020 ± 0.002 (0.50 ± 0.05)	0.040 ± 0.002 (1.00 ± 0.05)	0.010 ± 0.006 (0.25 ± 0.15)
0603A	0.031 ± 0.006 (0.80 ± 0.15)	0.031 ± 0.006 (0.80 ± 0.15)	0.063 ± 0.006 (1.60 ± 0.15)	0.016 ± 0.008 (0.40 ± 0.20)
0805A	0.035 ± 0.008 (0.90 ± 0.20)	0.049 ± 0.008 (1.25 ± 0.20)	0.079 ± 0.008 (2.00 ± 0.20)	0.020 ± 0.012 (0.50 ± 0.30)
1206A	0.043 ± 0.008 (1.10 ± 0.20)	0.063 ± 0.008 (1.60 ± 0.20)	0.126 ± 0.008 (3.20 ± 0.20)	0.028 ± 0.012 (0.70 ± 0.30)
1806A	0.063 ± 0.008 (1.60 ± 0.20)	0.063 ± 0.008 (1.60 ± 0.20)	0.177 ± 0.008 (4.5 ± 0.20)	0.028 ± 0.012 (0.70 ± 0.30)
1812A	0.059 ± 0.008 (1.50 ± 0.20)	0.126 ± 0.008 (3.20 ± 0.20)	0.177 ± 0.008 (4.5 ± 0.20)	0.028 ± 0.012 (0.70 ± 0.30)
1813A	0.091 ± 0.010 (2.30 ± 0.25)	0.126 ± 0.010 (3.20 ± 0.25)	0.177 ± 0.010 (4.5 ± 0.25)	0.028 ± 0.012 (0.70 ± 0.30)
2218A	0.071 ± 0.010 (1.80 ± 0.25)	0.200 ± 0.010 (5.08 ± 0.25)	0.220 ± 0.020 (5.59 ± 0.51)	0.030 ± 0.014 (0.76 ± 0.35)
2219A	0.078 ± 0.010 (1.97 ± 0.25)	0.200 ± 0.010 (5.08 ± 0.25)	0.220 ± 0.020 (5.59 ± 0.51)	0.030 ± 0.014 (0.76 ± 0.35)
2220A	0.126 ± 0.010 (3.20 ± 0.25)	0.200 ± 0.010 (5.08 ± 0.25)	0.220 ± 0.020 (5.59 ± 0.51)	0.030 ± 0.014 (0.76 ± 0.35)
3312A	0.090 ± 0.008 (2.28 ± 0.20)	0.120 ± 0.008 (3.05 ± 0.20)	0.335 ± 0.008 (8.5 ± 0.20)	0.043 ± 0.016 (1.09 ± 0.40)

Dimensions are in inches (mm).

SRFB SERIES





DATA TABLE

Vanguard P/N	Impedance* (Ω)	DCR max (Ω)	Current Rating max (A)	Package
SRFB0402A-100**-*	10	0.055	0.5	0402A
SRFB0402A-600**-*	60	0.5	0.2	0402A
SRFB0402A-121**-*	120	0.6	0.2	0402A
SRFB0402A-301**-*	300	0.8	0.1	0402A
SRFB0402A-471**-*	470	1.3	0.25	0402A
SRFB0402A-601**-*	600	1.2	0.05	0402A
SRFB0402A-102**-*	1000	1.6	0.05	0402A
SRFB0603A-070**-*	7	0.12	0.9	0603A
SRFB0603A-100**-*	10	0.12	0.9	0603A
SRFB0603A-300**-*	30	0.041	3	0603A
SRFB0603A-600**-*	60	0.041	3	0603A
SRFB0603A-800**-*	80	0.18	0.4	0603A
SRFB0603A-101**-*	100	0.18	0.4	0603A
SRFB0603A-121**-*	120	0.06	2	0603A
SRFB0603A-151**-*	150	0.18	0.4	0603A
SRFB0603A-221**-*	220	0.85	2	0603A
SRFB0603A-301**-*	300	0.31	0.4	0603A
SRFB0603A-331**-*	330	0.125	0.05	0603A
SRFB0603A-601**-*	600	0.14	2	0603A
SRFB0603A-102**-*	1000	0.58	0.3	0603A
SRFB0805A-110**-*	11	0.11	0.3	0805A
SRFB0805A-300**-*	30	0.11	0.3	0805A
SRFB0805A-500**-*	50	0.16	0.3	0805A
SRFB0805A-600**-*	60	0.031	3	0805A
SRFB0805A-900**-*	90	0.021	6	0805A
SRFB0805A-101**-*	100	0.16	0.3	0805A
SRFB0805A-121**-*	120	0.21	0.3	0805A
SRFB0805A-181**-*	180	0.027	6	0805A
SRFB0805A-221**-*	220	0.052	3	0805A
SRFB0805A-301**-*	300	0.21	0.3	0805A
SRFB0805A-601**-*	600	0.1	2	0805A
SRFB0805A-102**-*	1000	0.32	1	0805A
SRFB0805A-152**-*	1500	0.71	0.3	0805A
SRFB0805A-202**-*	2000	0.35	1	0805A
SRFB1206A-300**-*	30	0.031	3	1206A
SRFB1206A-500**-*	50	0.0085	6	1206A
SRFB1206A-700**-*	70	0.042	3	1206A
SRFB1206A-900**-*	90	0.017	0.3	1206A
SRFB1206A-101**-*	100	0.021	0.45	1206A
SRFB1206A-121**-*	120	0.028	5	1206A

*Impedance measured at 100 MHz

**Impedance measured at 30 MHz

SRFB SERIES





DATA TABLE

Vanguard P/N	Impedance* (Ω)	DCR max (Ω)	Current Rating max (A)	Package
SRFB1206A-151**-**	150	0.053	3	1206A
SRFB1206A-301**-**	300	0.06	3	1206A
SRFB1206A-601**-**	600	0.22	1	1206A
SRFB1206A-102**-**	1000	0.31	1	1206A
SRFB1206A-152**-**	1500	0.4	0.35	1206A
SRFB1206A-202**-**	2000**	0.62	0.2	1206A
SRFB1806A-500**-**	50	0.011	6	1806A
SRFB1806A-600**-**	60	0.045	3	1806A
SRFB1806A-800**-**	80	0.045	3	1806A
SRFB1806A-101**-**	100	0.023	6	1806A
SRFB1806A-151**-**	150	0.51	0.2	1806A
SRFB1812A-700**-**	70	0.045	3	1812A
SRFB1812A-121**-**	120	0.025	6	1812A
SRFB1813A-101**-**	100	0.008	8	1813A
SRFB2218A-181**-**	180	0.045	5	2218A
SRFB2219A-551**-**	550	0.038	4	2219A
SRFB2220A-271**-**	270	0.038	4	2220A
SRFB3312A-101**-**	100	0.035	10.00	3312A

*Impedance measured at 100 MHz

**Impedance measured at 30 MHz

VE PART NUMBER STRUCTURE KEY

EXAMPLE: SRFB0603-300KS-5-T

IMPEDANCE (Ω)

The first two digits are significant. The last digit specifies zeros to follow:

300 = 30 Ohms
301 = 300 Ohms

TOLERANCE (%)

J	± 5
K	± 10
M	± 20
P	± 25

TERMINATION

S	SnPb
---	------

RELIABILITY

5	Class "B" (Group A)
6	Class "S" (Group A+B)
7	Other

PACKAGING (Default Bulk)

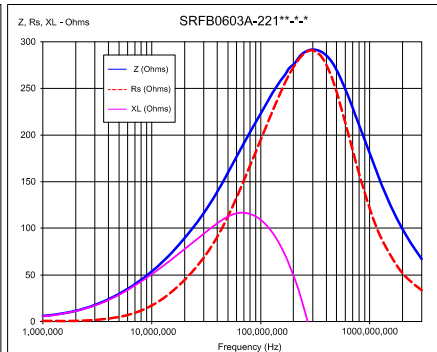
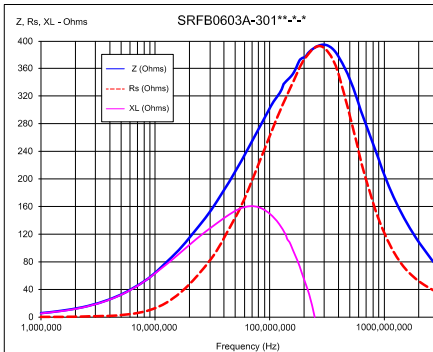
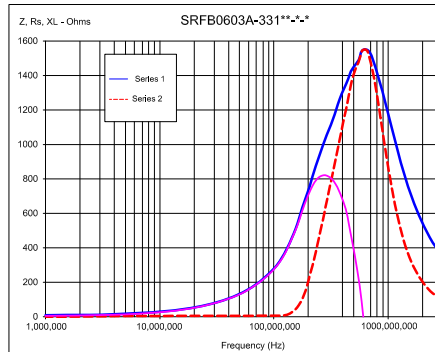
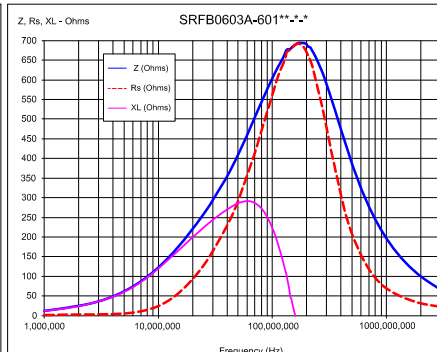
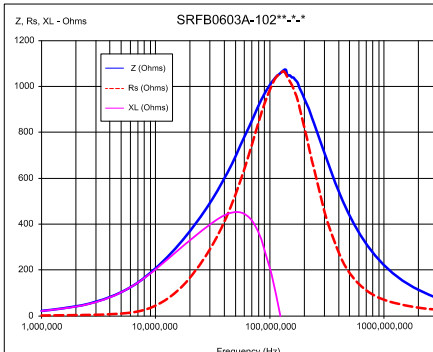
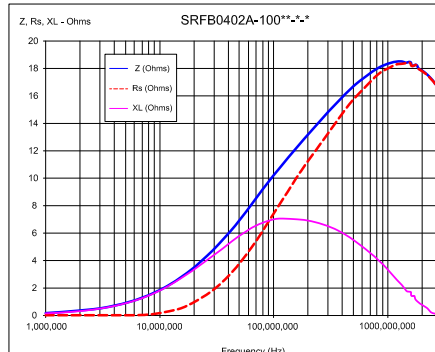
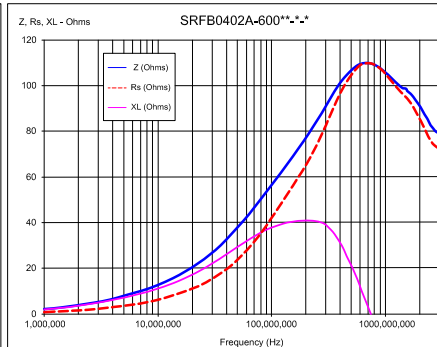
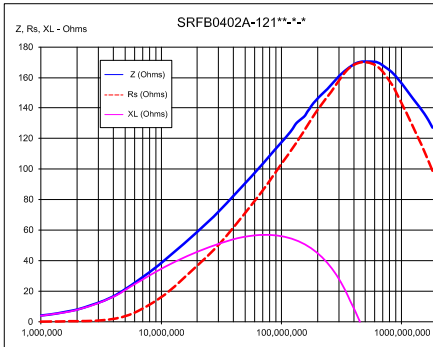
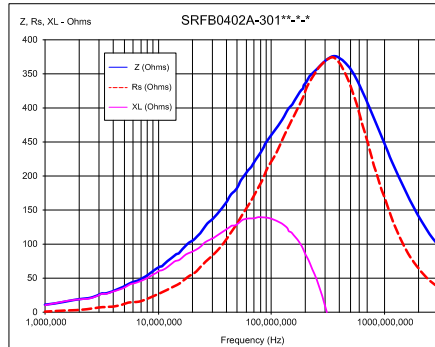
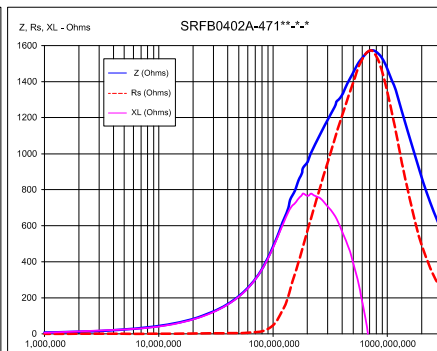
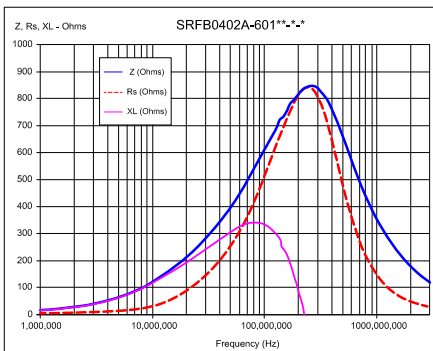
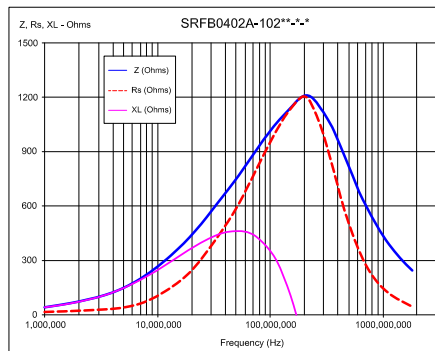
B	Bulk
T	Tape and Reel

SRFB SERIES





DATA CURVES

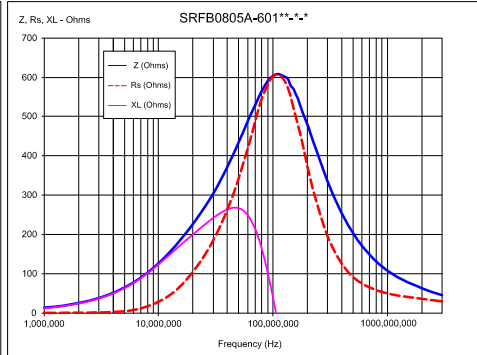
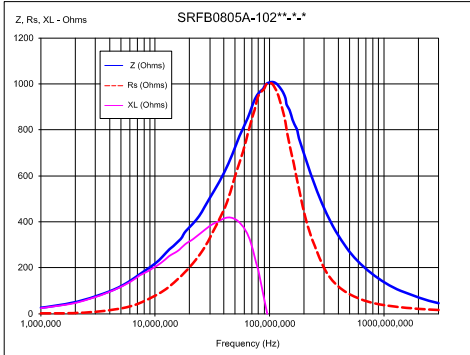
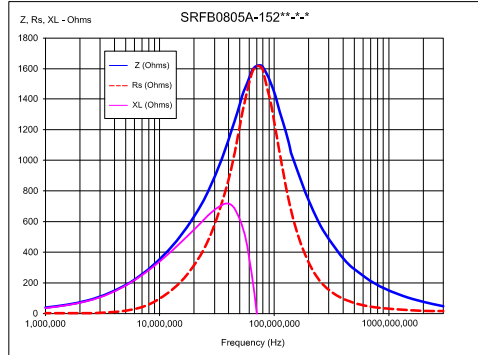
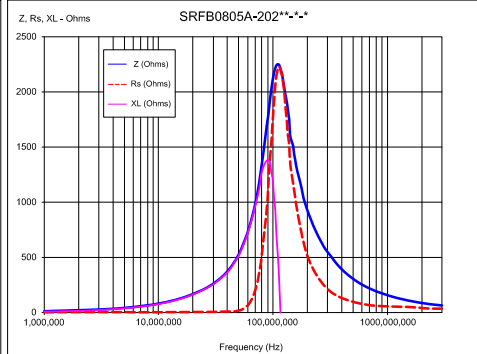
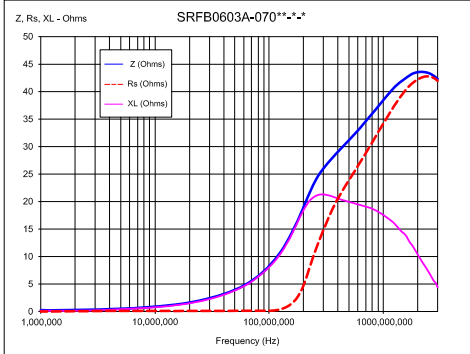
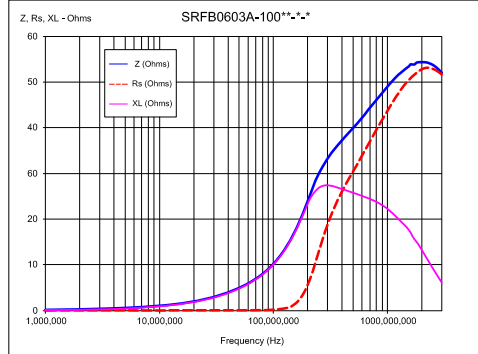
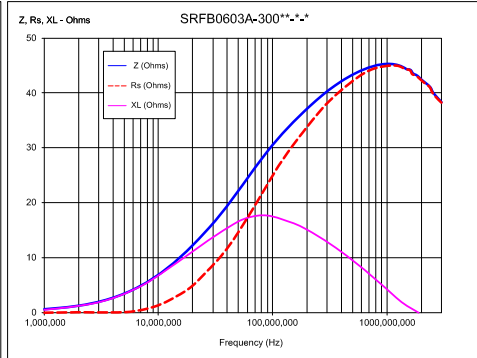
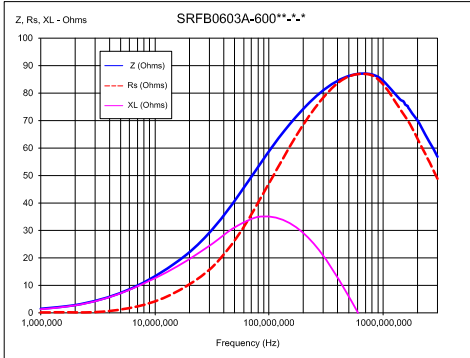
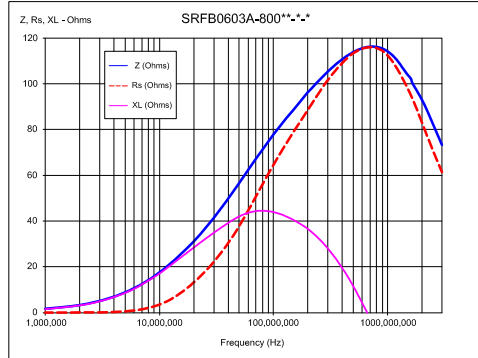
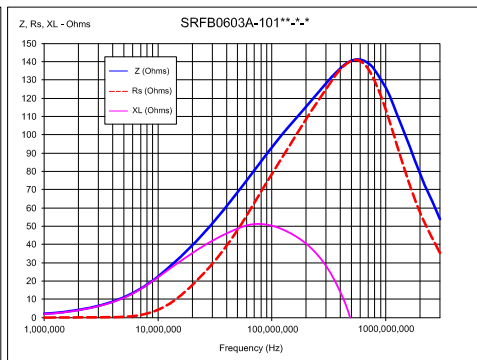
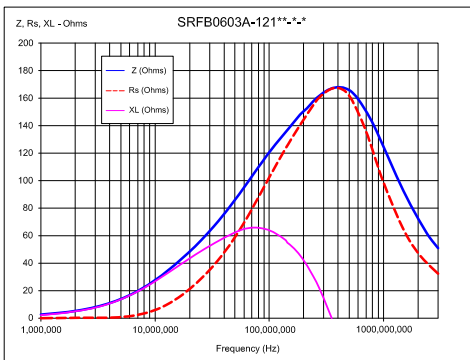
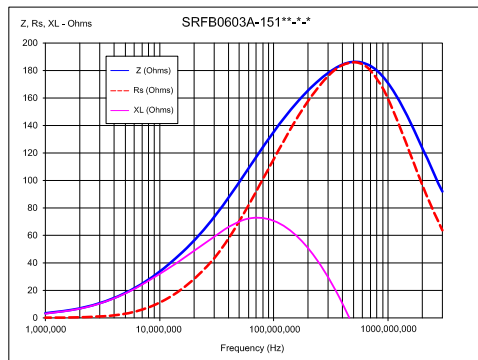


SRFB SERIES





DATA CURVES

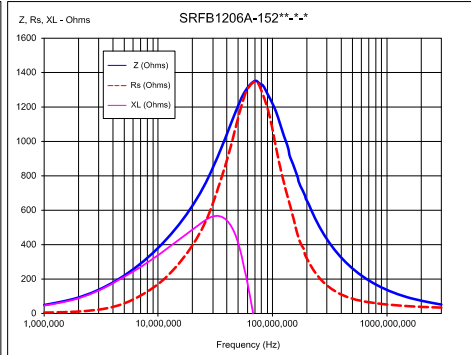
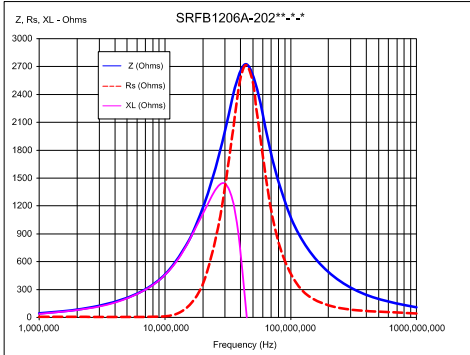
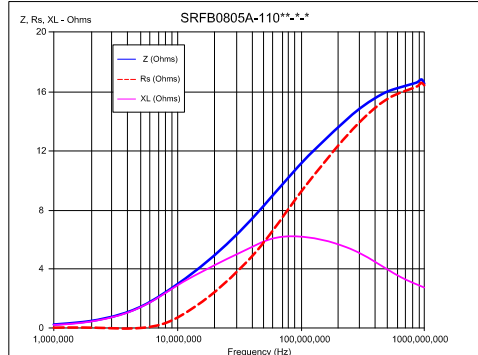
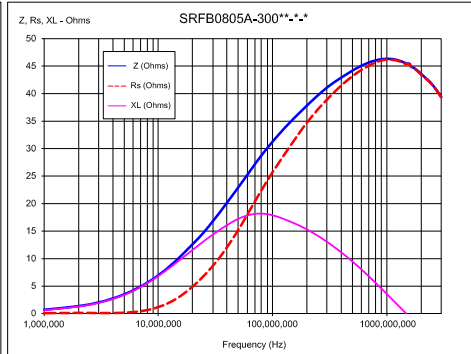
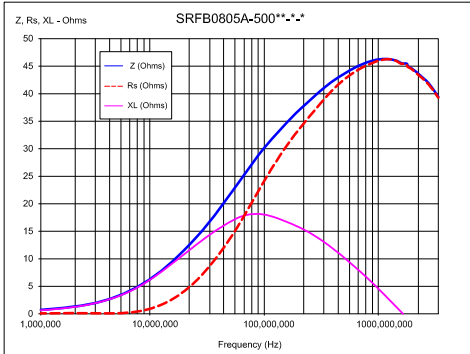
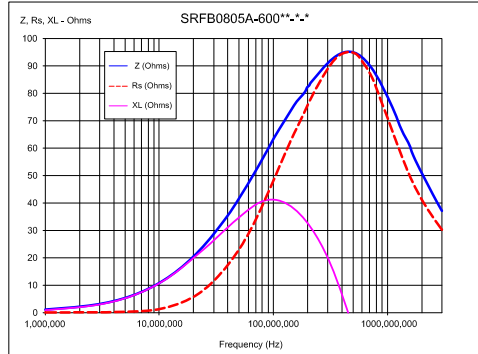
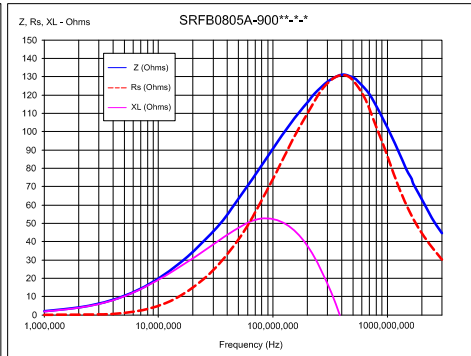
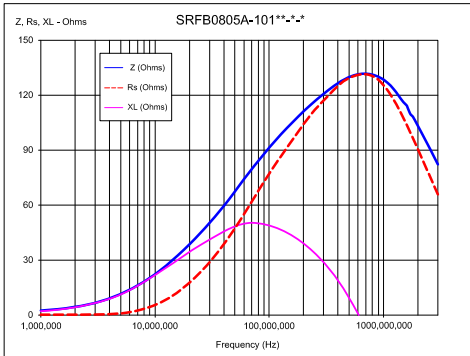
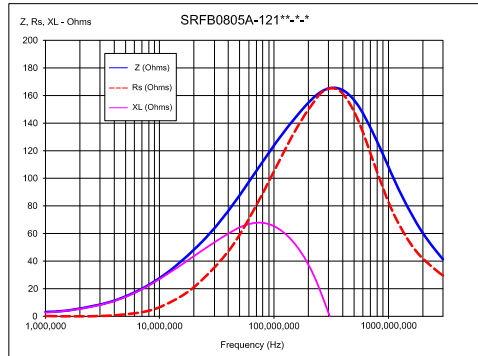
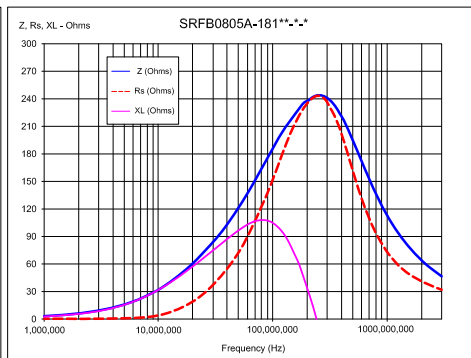
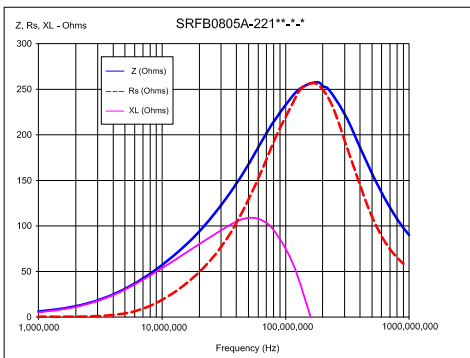
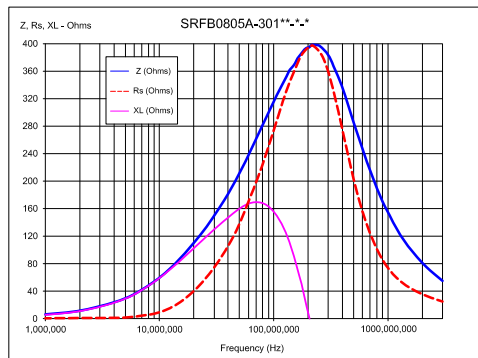


SRFB SERIES





DATA CURVES

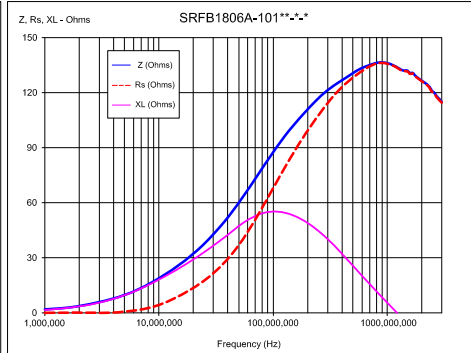
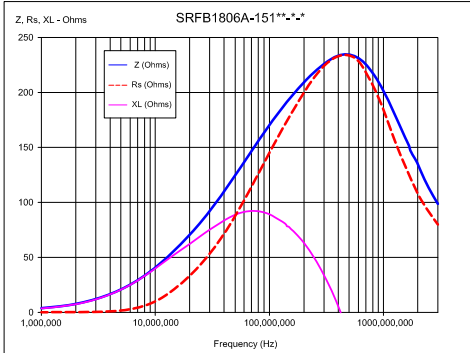
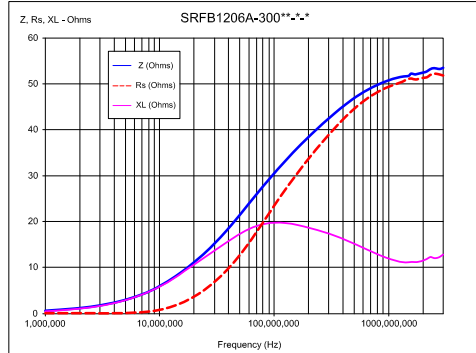
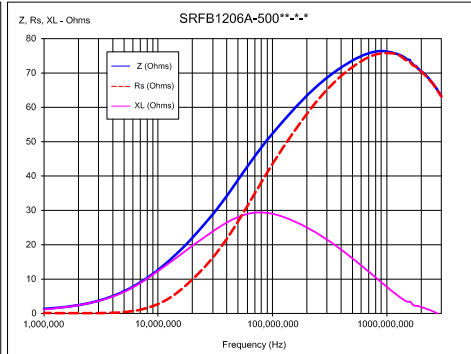
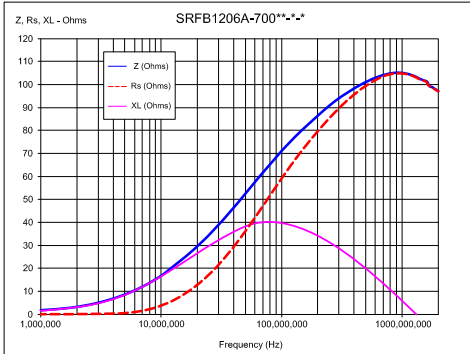
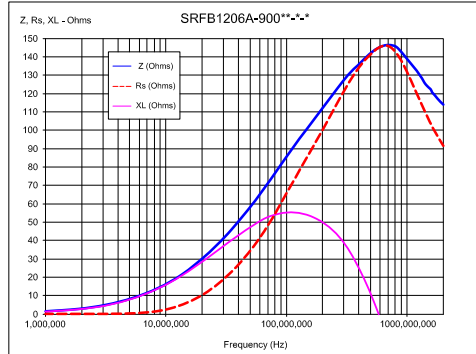
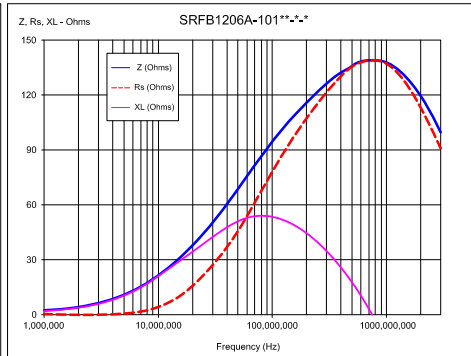
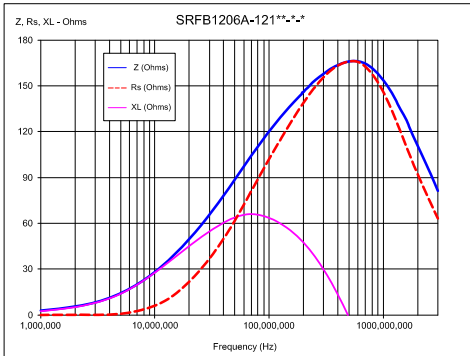
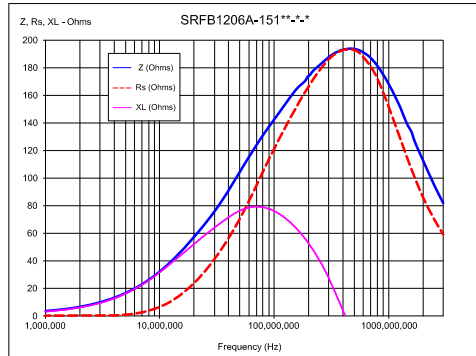
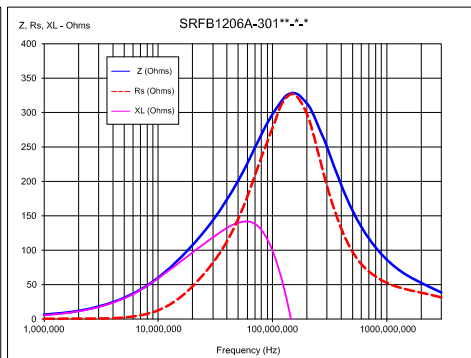
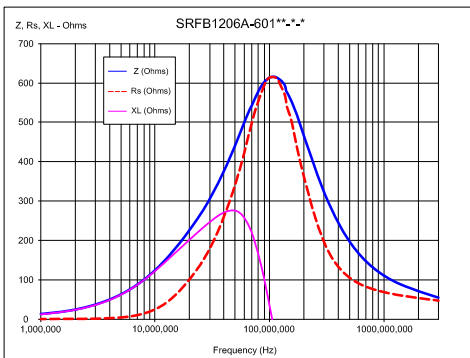
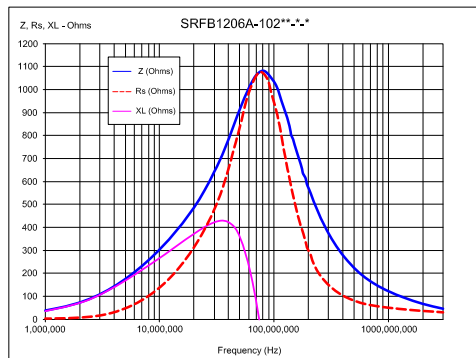


SRFB SERIES





DATA CURVES

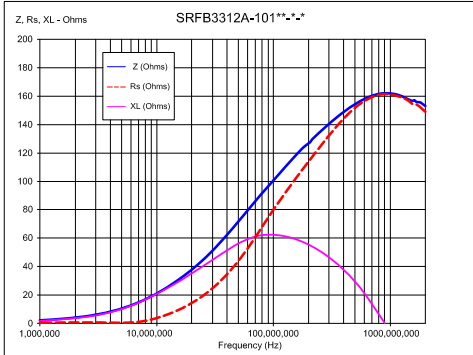
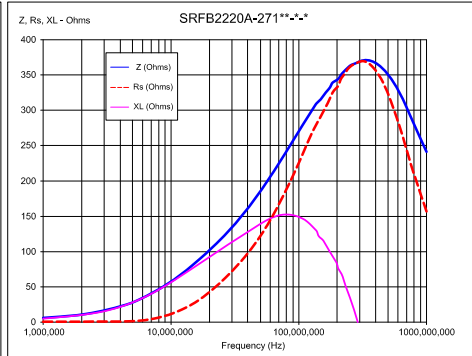
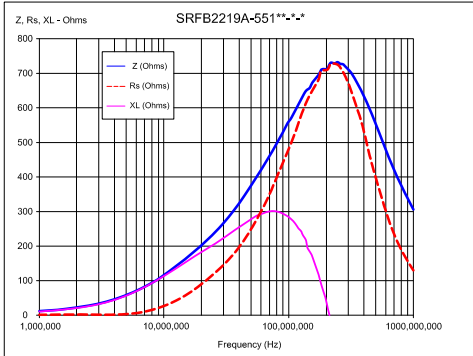
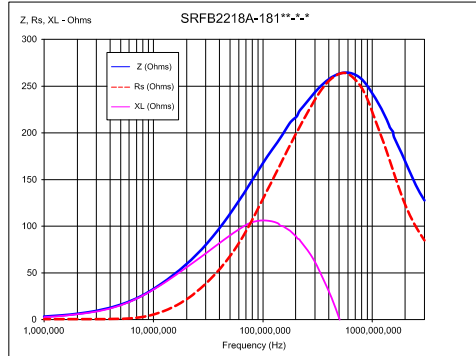
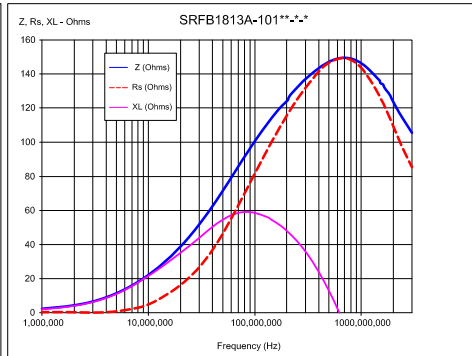
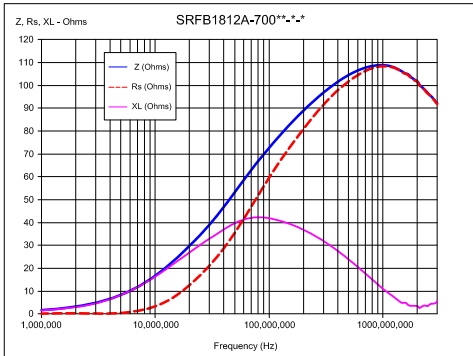
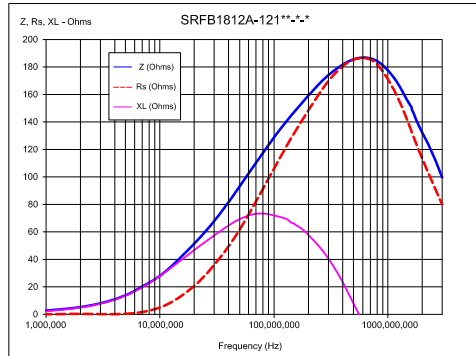
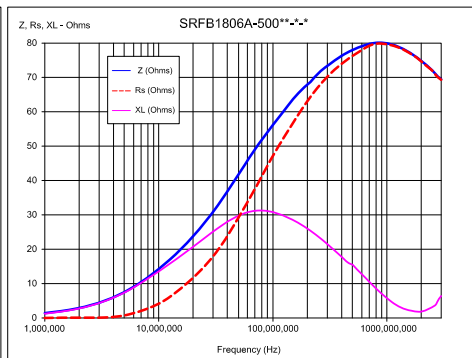
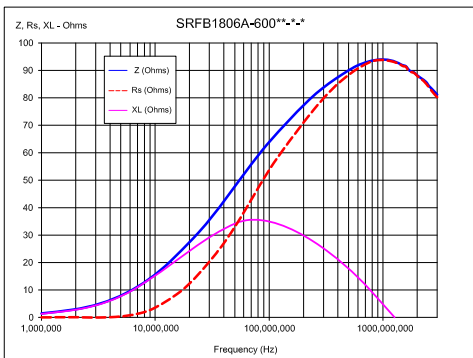
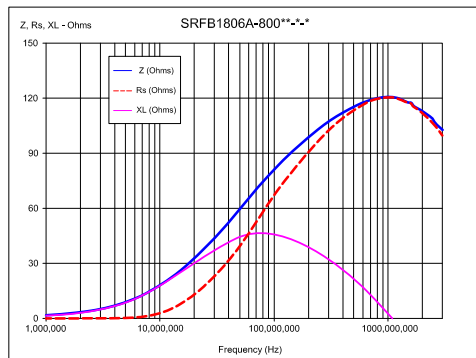


SRFB SERIES





DATA CURVES



SRFB SERIES

