

RF/Microwave Capacitors
RF/Microwave Multilayer Capacitors (MLC)
100B Series Porcelain Superchip® Multilayer Capacitors



CAPACITANCE VALUES

Cap. Code	Cap. (pF)	Tol.	Rated WVDC		Cap. Code	Cap. (pF)	Tol.	Rated WVDC		Cap. Code	Cap. (pF)	Tol.	Rated WVDC		CAP. CODE	CAP. (pF)	TOL.	RATED WVDC			
			STD.	EXT.				STD.	EXT.				STD.	EXT.				STD.	EXT.		
0R1	0.1	B	500	1500	2R4	2.4	B, C, D	500	1500	200	20	F, G, J, K, M	500	1500	151	150	300	EXT.			
0R2	0.2				2R7	2.7				220	22				161	160		1000			
0R3	0.3	B, C			3R0	3.0				240	24				181	180		VOLT.			
0R4	0.4				3R3	3.3				270	27				201	200		EXT.			
0R5	0.5	B, C, D			3R6	3.6				300	30				221	220	200	600			
0R6	0.6				3R9	3.9				330	33				241	240		EXT.			
0R7	0.7				4R3	4.3				360	36				271	270		EXT.			
0R8	0.8				4R7	4.7				390	39				301	300		600			
0R9	0.9				5R1	5.1				430	43				331	330	100	VOLT.			
1R0	1.0				5R6	5.6				470	47				361	360		EXT.			
1R1	1.31				6R2	6.2				510	51				391	390		600			
1R2	1.2				6R8	6.8	560			56	431				430	VOLT.					
1R3	1.3				7R5	7.5	620			62	471				470	EXT.					
1R4	1.4				8R2	8.2	680			68	511				510	50	300				
1R5	1.5				9R1	9.1	750			75	561				560		VOLT.				
1R6	1.6	F, G, J, K, M			100	10	820			82	EXT.										
1R7	1.7				110	11	910			91	681	680		300							
1R8	1.8				120	12	101			100	751	750		VOLT.							
1R9	1.9				130	13	111			110	821	820		EXT.							
2R0	2.0				150	15	121			120	911	910		50	300						
2R1	2.1				160	16	131			130	102	1000			VOLT.						
2R2	2.2				180	18									EXT.						

VRMS = 0.707 X WVDC
• SPECIAL VALUES, TOLERANCES, DIFFERENT WVDC AND MATCHING AVAILABLE. • ENCAPSULATION OPTION AVAILABLE. PLEASE CONSULT FACTORY.NOTE: EXTENDED WVDC DOES NOT APPLY TO CDR PRODUCTS.

HOW TO ORDER

Series 100

Case Size B

See mechanical dimensions below

Capacitance 910

EIA Capacitance Code in pF.
First two digits = significant figures or "R" for decimal place.
Third digit = number of zeros or after "R" significant figures

Capacitance Tolerance Code J

Code	B	C	D	F	G	J	K	M
Tol.	±1 pF	±25 pF	±5 pF	±1%	±2%	±5%	±10%	±20%

W

500

X

T

Packaging
T = Tape and Reel, 500 pc qty
TV = Vertical Tape and Reel, 500 pc qty
Please see last column of mechanical configuration table for other options.

Laser Marking (Optional)

Voltage Rating

Termination Style Code
Please see 2nd Column Mechanical Configuration Table

The above part number refers to a 100 B Series (case size B) 91 pF capacitor, J tolerance (±5%), 500 WVDC, with W termination (Tin /Lead, Solder Plated over Nickel Barrier), laser marking and Tape and Reel packaging.



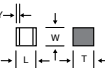
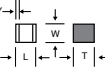
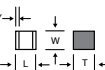
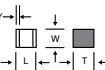
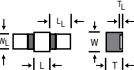
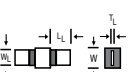
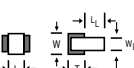
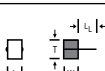
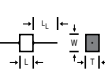
RF/Microwave Capacitors

RF/Microwave Multilayer Capacitors (MLC)

100B Series Porcelain Superchip® Multilayer Capacitors



MECHANICAL CONFIGURATION

AVX Series & Case Size	AVX Term. Code	MIL-PRF-55681	Case Size & Type	Outline W/T is a Termination Surface	Body Dimensions inches (mm)			Lead and Termination Dimensions and Material			Pkg Type	Pkg Code	
					Length (L)	Width (W)	Thickness (T)	Overlap (Y)	Materials				
100B	W	CDR14BG	 Solder Plate		.110+ .020 - .01 (2.79 + 0.51-0.25)	.110 ±.015 (2.79 ±.38)	.102 (2.59) max.	.015 (0.38) ±.010 (0.25)	Tin / Lead, Solder Plated over Nickel Barrier Termination			T&R, 1000 or 500 pcs Vertical T&R, 1000 or 500 pcs Cap Pac, 100 pcs	T1K or T TV1K or TV C100
100B	P	CDR14BG	 Pellet		.110+ .035 - .01 (2.79 + 0.89-0.25)	.110 ±.015 (2.79 ±.38)			Heavy Tin/Lead Coated, over Nickel Barrier Termination			T&R, 1000 or 500 pcs Vertical T&R, 1000 or 500 pcs Cap Pac, 100 pcs	T1K or T TV1K or TV C100
100B	T	N/A	 Solderable Nickel		.110+ .035 - .01 (2.79 + 0.51-0.25)	.110 ±.015 (2.79 ±.38)			RoHS Compliant Tin Plated over Nickel Barrier Termination			T&R, 1000 or 500 pcs Vertical T&R, 1000 or 500 pcs Cap Pac, 100 pcs	T1K or T TV1K or TV C100
100B	CA	CDR13BG	 Gold Chip		.110+ .020 - .010 (2.79 + 0.51-0.25)	.110 ±.015 (2.79 ±.38)			RoHS Compliant Gold Plated over Nickel Barrier Termination			T&R, 1000 or 500 pcs Vertical T&R, 1000 or 500 pcs Cap Pac, 100 pcs	T1K or T TV1K or TV C100
100B	MS	CDR21BG	 Microstrip		.135 ±.015 (3.43 ±.38)	.110 ±.015 (2.79 ±.38)	.120 (3.05) max.	N/A	Length (L _L)	Width (W _L)	Thickness (T _L)	Cap Pac, 20 pcs	C20
100B	AR	CDR22BG	 Axial Ribbon				.102 (2.59) max.		.250 (6.35) min.	.093±.005 (2.36 ±.013)	.004 ± .001 (.102±.025)	Box, 20 or 100 pcs	B20 or B100
100B	RR	CDR24BG	 Radial Ribbon									Box, 20 or 100 pcs	B20 or B100
100B	RW	CDR23BG	 Radial Wire		.145 ±.020 (3.68 ±.51)				.500 (12.7)	#26 AWG., .016 (.406) dia. nominal	Box, 20 or 100 pcs	B20 or B100	
100B	AW	CDR25BG	 Axial Wire								Box, 20 or 100 pcs	B20 or B100	

Additional lead styles available: Narrow Microstrip (NM), Narrow Axial Ribbon (NA) and Vertical Narrow Microstrip (H). Other lead lengths are available; consult factory. All leads are high purity silver attached with high temperature solder and are **RoHS** compliant.

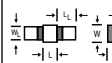
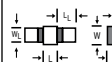
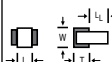
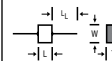
RF/Microwave Capacitors

RF/Microwave Multilayer Capacitors (MLC)

100B Series Porcelain Superchip® Multilayer Capacitors



NON-MAGNETIC MECHANICAL CONFIGURATION

AVX Series & Case Size	AVX Term. Code	MIL-PRF-55681	Case Size & Type	Outline W/T is a Termination Surface	Body Dimensions inches (mm)			Lead and Termination Dimensions and Material			Pkg Type	Pkg Code	
					Length (L)	Width (W)	Thickness (T)	Overlap (Y)	Materials				
100B	WN	Meets Requirements	 Non-Mag		.110+ .020 - .01 (2.79 + 0.51-0.25)	.110 ±.015 (2.79 ±0.38)	.102 (2.59) max.	.015 (0.38) ±.010 (0.25)	Tin / Lead, Solder Plated over Nickel Barrier Termination			T&R, 1000 or 500 pcs Vertical T&R, 1000 or 500 pcs Cap Pac, 100 pcs	T1K or T TV1K or TV C100
100B	PN	Meets Requirements	 Solderable Nickel		.110+ .035 - .01 (2.79 + 0.51-0.25)	.110 ±.015 (2.79 ±0.38)			Heavy Tin / Lead, Coated over Non-Magnetic Barrier Termination			T&R, 1000 or 500 pcs Vertical T&R, 1000 or 500 pcs Cap Pac, 100 pcs	T1K or T TV1K or TV C100
100B	TN	Meets Requirements	 Gold Chip		.110+.020 - .010 (2.79 + 0.51-0.25)	.110 ±.015 (2.79 ±0.38)			RoHS Compliant Tin Plated over Non-Magnetic Barrier Termination			T&R, 1000 or 500 pcs Vertical T&R, 1000 or 500 pcs Cap Pac, 100 pcs	T1K or T TV1K or TV C100
100B	MN	Meets Requirements	 Microstrip		.135 ±.015 (3.43 ±0.38)	.110 ±.015 (2.79 ±0.38)	.120 (3.05) max.	N/A	Length (L _L)	Width (W _L)	Thickness (T _L)	Cap Pac, 20 pcs	C20
100B	AN	Meets Requirements	 Axial Ribbon				.102 (2.59) max.		.250 (6.35) (6.35) min.	.093±.005 (2.36 ±0.13)	.004 ± .001 (.102±.025)	Box, 20 or 100 pcs	B20 or B100
100B	FN	Meets Requirements	 Radial Ribbon									Box, 20 or 100 pcs	B20 or B100
100B	RN	Meets Requirements	 Radial Wire		.145 ±.020 (3.68 ±0.51)				.500 (12.7)	#26 AWG., .016 (.406) dia. nominal	Box, 20 or 100 pcs	B20 or B100	
100B	BN	Meets Requirements	 Axial Wire								Box, 20 or 100 pcs	B20 or B100	

Additional lead styles available: Narrow Microstrip (NM), Narrow Axial Ribbon (NA) and Vertical Narrow Microstrip (H). Other lead lengths are available; consult factory. All leads are high purity silver attached with high temperature solder and are **RoHS** compliant.

RF/Microwave Capacitors

RF/Microwave Multilayer Capacitors (MLC)

100B Series Porcelain Superchip® Multilayer Capacitors



SUGGESTED MOUNTING PAD DIMENSIONS

Horizontal Electrode Orientation

Vertical Electrode Orientation

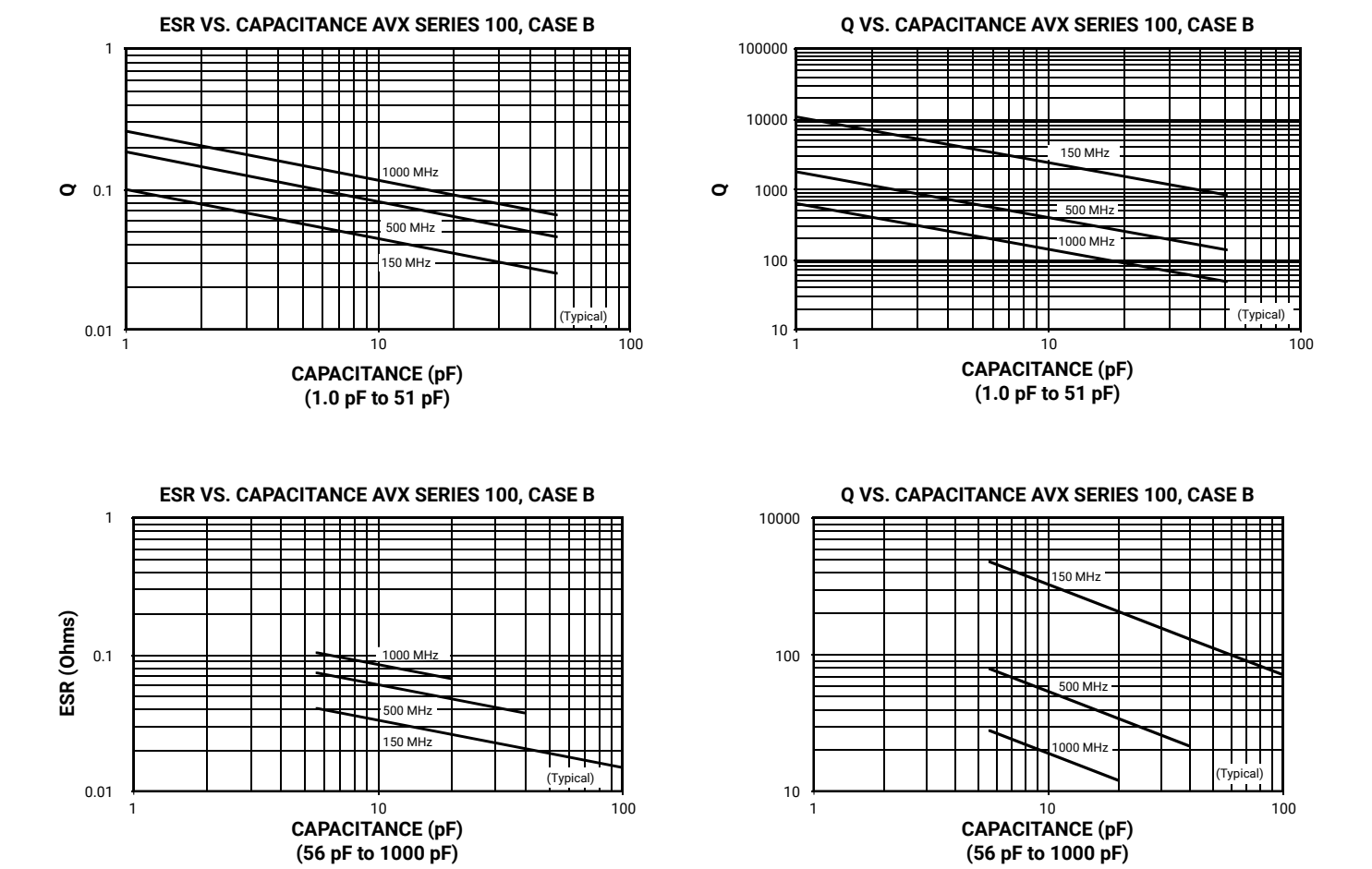
Case B Vertical Mount

Cap Value	Pad Size	A Min.	B Min.	C Min.	D Min.
0.1 pF	Normal	.065	.050	.075	.175
	High Density	.045	.030	.075	.135
0.2 pF	Normal	.090	.050	.075	.175
	High Density	.070	.030	.075	.135
0.3 to 510 pF	Normal	.110	.050	.075	.175
	High Density	.090	.030	.075	.135
> 510 pF	Normal	.120	.050	.075	.175
	High Density	.100	.030	.075	.135

Case B Vertical Mount

All Values	Pad Size	A Min.	B Min.	C Min.	D Min.
All Values	Normal	.130	.050	.075	.175
	High Density	.110	.030	.075	.135

PERFORMANCE DATA

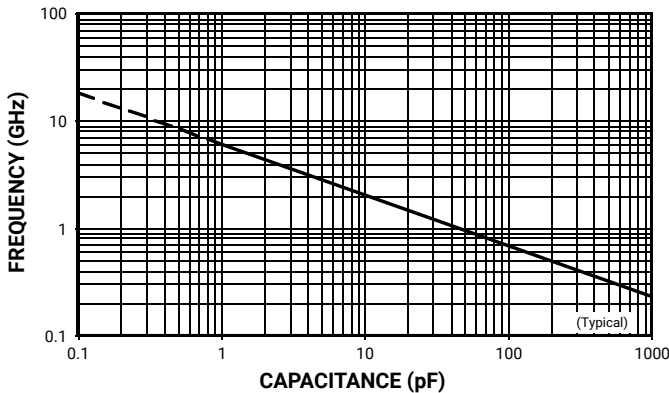


RF/Microwave Capacitors
RF/Microwave Multilayer Capacitors (MLC)
100B Series Porcelain Superchip® Multilayer Capacitors

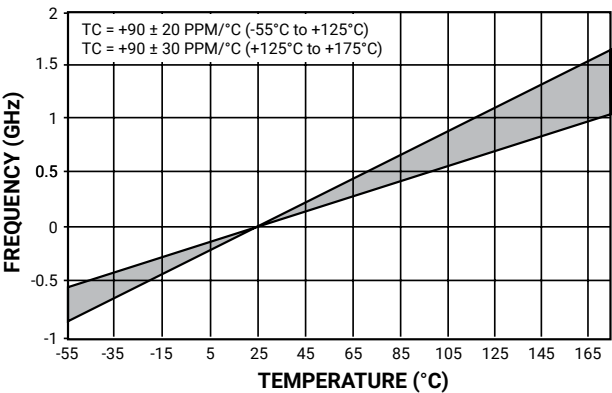


PERFORMANCE DATA

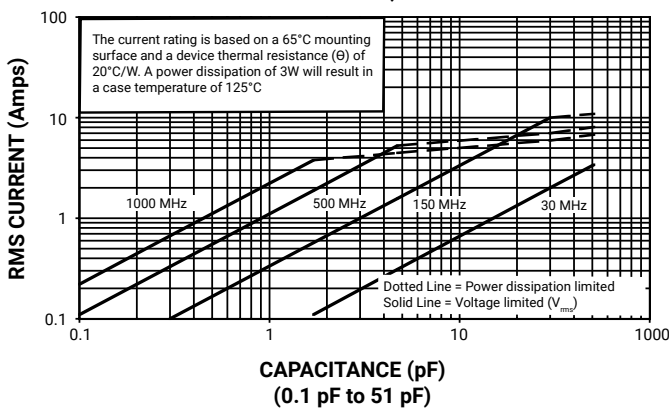
SERIES RESONANCE VS. CAPACITANCE
AVX SERIES 100, CASE B



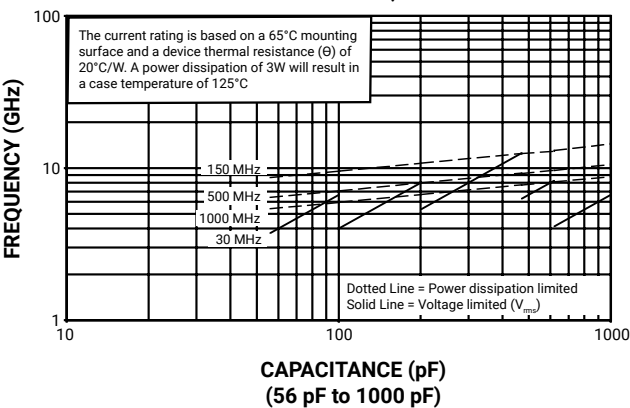
CAPACITANCE CHANGE VS. TEMPERATURE
AVX SERIES 100, CASE B



CURRENT RATING VS. CAPACITANCE
AVX SERIES 100, CASE B



CURRENT RATING VS. CAPACITANCE
AVX SERIES 100, CASE B



The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

RF/Microwave Capacitors
RF/Microwave Multilayer Capacitors (MLC)
100B Series Porcelain Superchip® Multilayer Capacitors



PERFORMANCE DATA

