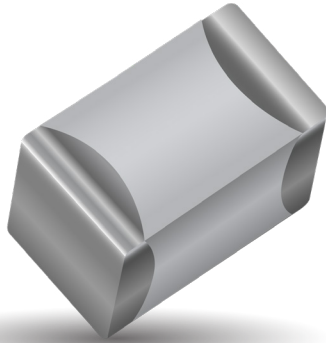


# RF/Microwave Capacitors

## RF/Microwave Multilayer Capacitors (MLC)

### 200A Series BX Ceramic



#### FEATURES

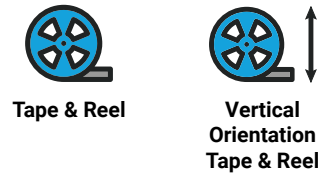
- Case A Size (.055" x .055")
- Lowest ESR/ESL
- Rugged Construction
- Extended WVDC Available
- Capacitance Range 510 pF to 0.01  $\mu$ F
- Mid-K
- High Reliability

#### GENERAL DESCRIPTION

KYOCERA AVX, the industry leader, offers new improved ESR/ESL performance for the 200A Series Capacitors. This Series exhibits high volumetric efficiency with superior IR characteristics. Ceramic construction provides a rugged, hermetic package.

Typical functional applications: Bypass, Coupling and DC Blocking. Typical circuit applications: Switching Power Supplies and High Power Broadband Coupling.

#### PACKAGING OPTIONS



#### ELECTRICAL SPECIFICATIONS

<b>Temperature Coefficient (TCC)</b>	$\pm 15\%$ maximum (-55°C to +125°C)
<b>Capacitance Range</b>	510 pF to 0.01 $\mu$ F
<b>Operating Temperature</b>	-55°C to +125°C*
<b>Dissipation Factor</b>	2.5% Max @ 1 KHz
<b>Insulation Resistance (IR)</b>	510 pF to 0.01 $\mu$ F 10 <sup>4</sup> Megohms min. @ 25°C at rated WVDC 10 <sup>3</sup> Megohms min. @ 125°C at rated WVDC
<b>Dielectric Absorption</b>	2% Typical
<b>Working Voltage (WVDC)</b>	See Capacitance Values table
<b>Dielectric Withstanding Voltage (DWV)</b>	250% of rated WVDC for 5 seconds
<b>Aging Effects</b>	3% maximum per decade hour.
<b>Piezoelectric Effects</b>	Negligible
<b>Capacitance Drift</b>	$\pm$ (0.02% or 0.02 pF), whichever is greater

#### ENVIRONMENTAL CHARACTERISTICS

<b>Thermal Shock</b>	Mil-STD-202, Method 107, Condition A
<b>Moisture Resistance</b>	Mil-STD-202, Method 106
<b>Low Voltage Humidity</b>	Mil-STD-202, Method 103, condition A, with 1.5 VDC applied while subjected to an environment of 85°C with 85% relative humidity for 240 hours
<b>Life Test</b>	MIL-STD-202, Method 108, for 2000 hours, at 125°C. 200% WVDC applied.
<b>Termination Styles</b>	Available in various surface mount styles. See Mechanical Configurations, page 3
<b>Terminal Strength</b>	Terminations for chips and Pellets withstand a pull of 5 lbs. min., 10 lbs. typical, for 5 seconds in direction perpendicular to the termination surface of the capacitor. Test per MIL-STD-202, method 211

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## CAPACITANCE VALUES

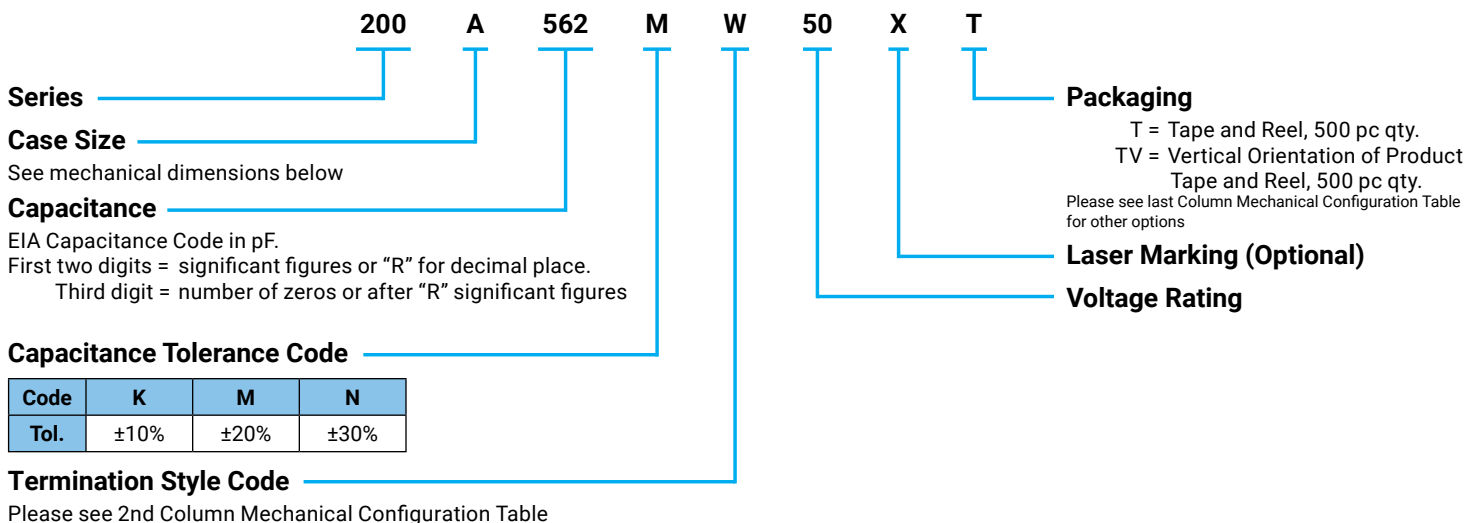
Cap. Code	Cap. (pF)	Tol.	Rated WVDC		Cap. Code	Cap. (pF)	Tol.	Rated WVDC							
			STD.	EXT.				STD.	EXT.						
511	510	K, M, N	50	100	202	2000	K, M, N	50	100						
561	560				VOLTAGE										
621	620														
681	680														
751	750				EXTENDED										
821	820														
911	910														
102	1000														
122	1200				EXTENDED										
152	1500														
182	1800														
											103	10,000			

$v_{rms} = 0.707 \times WVDC$

Special values, tolerances, different WVDC and matching available. Please consult factory.

\*Extended WVDC offering meets X7R characteristics

## HOW TO ORDER



The above part number refers to a 200 A Series (case size A) 5600 pF capacitor, M tolerance (±20%), 50 WVDC, with W termination (Tin / Lead, Solder Plated over Nickel Barrier), Laser Marking and Tape and Reel 1000 pc qty. Packaging

# RF/Microwave Capacitors

## RF/Microwave Multilayer Capacitors (MLC)

### 200A Series BX Ceramic



#### MECHANICAL CONFIGURATION

Series & Case Size	Term. Code	Case Size & Type	Outline W/T is a Termination Surface	Body Dimensions inches (mm)			Lead and Termination Dimensions and Material		Pkg Type & Qty	Pkg Code
				Length (L)	Width (W)	Thickness (T)	Overlap (Y)	Materials		
200A	W	A  Solder Plate		.055+.015 -.010 (1.40+0.38-0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 + .010 - .005 (0.25 + 0.25 - 0.13)	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
200A	P	A  Pellet		.055+.025 -.010 (1.40+0.64-0.25)	.055 ±.015 (1.40 ±0.38)			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
200A	T	A  Solderable Nickel Barrier		.055+.015 -.010 (1.40+0.38-0.25)	.055 ±.015 (1.40 ±0.38)			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
200A	CA	A  Gold Chip		.055+.015 -.010 (1.40+0.38-0.25)	.055 ±.015 (1.40 ±0.38)			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

#### NON-MECHANICAL CONFIGURATION

Series & Case Size	Term. Code	Case Size & Type	Outline W/T is a Termination Surface	Body Dimensions inches (mm)			Lead and Termination Dimensions and Material		Pkg Type & Qty	Pkg Code
				Length (L)	Width (W)	Thickness (T)	Overlap (Y)	Materials		
200A	WN	A  Non-Mag Solder Plate		.055+.015 -.010 (1.40+0.38-0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 + .010 - .005 (0.25 + 0.25 - 0.13)	Tin / Lead, Solder 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
200A	PN	A  Non-Mag Pellet		.055+.025 -.010 (1.40+0.64-0.25)	.055 ±.015 (1.40 ±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
200A	TN	A  Non-Mag Solderable Nickel Barrier		.055+.015 -.010 (1.40+0.38-0.25)	.055 ±.015 (1.40 ±0.38)			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