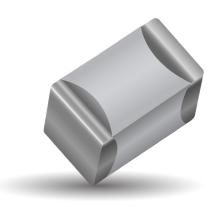
## **RF/Microwave Capacitors RF/Microwave Multilayer Capacitors (MLC) 200A Series BX Ceramic**





#### **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 pro-vides a rugged, hermetic package.

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

### **ELECTRICAL SPECIFICATIONS**

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

#### **FEATURES**

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

#### **PACKAGING OPTIONS**





Tape & Reel

Orientation Tape & Reel

### **ENVIRONMENTAL CHARACTERISTICS**

Themal Shock	Mil-STD-202, Method 107, Condition A				
Moisture Resistance	Mil-STD-202, Method 106				
Low Voltage Humidity	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				
Life Test	MIL-STD-202, Method 108, for 2000 hours, at 125°C. 200% WVDC applied.				
Termination Styles	Available in various surface mount styles. See Mechanical Configurations, page 3				
Terminal Strength	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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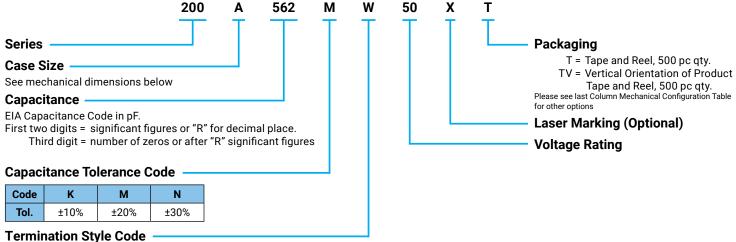


### CAPACITANCE VALUES

Cap. Code Cap. (pF) Tol.		Rated WVDC		Cap. Code	Cap (pE)	Tol.	Rated WVDC		
Cap. Code	Сар. (рг)	101.	STD.	EXT.	Cap. Code	Cap. (pF)	101.	STD.	EXT.
511	510				202	2000			
561	560			GE	222	2200			GE
621	620			VOLTAGE	272	2700			VOLTAGE
681	680			8	332	3300			8
751	750				392	3900			
821	820	K, M, N	50	100	472	4700	K, M, N	50	100
911	910				502	5000			
102	1000			EXTENDED	562	5600			EXTENDED
122	1200			ENI	682	6800			ENI
152	1500			EXT	822	8200			EXT
182	1800				103	10,000			

 $vrms = 0.707 \times WVDC$ 

### **HOW TO ORDER**



Please see 2nd Column Mechanical Configuration Table

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

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

<sup>\*</sup>Extended WVDC offering meets X7R characteristics

# **RF/Microwave Capacitors RF/Microwave Multilayer Capacitors (MLC) 200A Series BX Ceramic**



### **MECHANICAL CONFIGURATION**

Series & Case	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						
Size				Length (L)	Width (W)	Thickness (T)	Overlap (Y)	Materials	rkg Type & Qty	rky code					
200A	w	A 😭 Solder Plate	$\begin{array}{c c} Y \to \left  \begin{array}{c} \bot \\ \hline \end{array} \right  \begin{array}{c} \underline{W} \\ \hline \end{array} \\ \to \left  \begin{array}{c} \bot \\ \end{array} \right  \begin{array}{c} \bot \\ \hline \end{array} \right  \begin{array}{c} \bot \\ \hline \end{array} \right  \begin{array}{c} \bot \\ \hline \end{array}$	.055+.015010 (1.40+0.38-0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 + .010005	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	Р	A 😭 Pellet	$\begin{array}{c c} Y \to & \downarrow & \downarrow \\ \hline & \underline{w} & \hline \\ \to & L & \leftarrow^{\dagger} \to & T & \leftarrow \end{array}$	.055+.025010 (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	Т	A 📦 Solderable Nickel Barrier	$\begin{array}{c c} Y \to & \downarrow & \downarrow \\ \hline & & w \\ \hline & \to & \downarrow & \downarrow \\ \hline & \downarrow & \downarrow & \uparrow \\ \hline & \downarrow & \downarrow & \uparrow \\ \hline \end{array}$	.055+.015010 (1.40+0.38-0.25)	.055 ±.015 (1.40 ±0.38)		` /	` '	` ′	` '	` '	(0.25 + 0.25 - 0.13)	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	Y→   ← ↓ w	.055+.015010 (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		Case Size & Type	Outline W/T is a Termination Surface	Body Dimensions inches (mm)			Lead and Termination Dimensions and Material		Dia Taran Cons	Di O d-					
				Length (L)	Width (W)	Thickness (T)	Overlap (Y)	Materials	Pkg Type & Qty	Pkg Code					
200A	WN	A Non-Mag Solder Plate	Y→  ← ↓   w     →   L  ← †→   T  ←	.055+.015010 (1.40+0.38-0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.		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	Y→  ← ↓   <u>w</u>	.055+.025010   .055 ±.015   .057   .055+.025010   .055 ±.015   .057   .057   .057   .057   .057   .057   .057	(1.45)		(1.45)	(1.45)	(1.45)	(1.45)	1.40 ±0.38) (1.45)	.010 + .010005 (0.25 + 0.25 - 0.13)	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	Y→   ← ↓ <u>w</u> □ □ →   L   ← ↑ →   T   ←	.055+.015010 (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					

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