

CERAMIC CAPACITORS

Single-Layer Capacitors

AC Rated Ceramic Disc Capacitors, Safety Rated

	Product Family	Series	Voltage		Capacitance	Tolerance	Class	Temperature Characteristics					
			X Rating	Y Rating									
X1 / Y1	Vishay BCcomponents 	VY1	760 V _{AC}	500 V _{AC}	10 pF to 22 pF	± 10 % ± 20 % ± 20 %	1	U2J (N750)					
					33 pF to 4.7 nF		2	Y5S, Y5U					
					1 nF to 4.7 nF		2	Y5V					
	Vishay BCcomponents 	Compact Series VY1°C	760 V _{AC}	500 V _{AC}	470 pF to 4.7 nF	± 20 %	2	Y5U					
					Vishay Draloric 		VKP	760 V _{AC}	500 V _{AC}	470 pF to 4.7 nF	± 10 % ± 20 %	2	Y5U
	Vishay Cera-Mite 	440L	760 V _{AC}	500 V _{AC}		33 pF				± 10 % ± 20 %		1	U2J (N750)
					47 pF to 4.7 nF	2	Y5S, Y5T, Y5U						
	X1 / Y2	Vishay BCcomponents 	VY2	440 V _{AC}	300 V _{AC}	10 pF to 47 pF	± 10 % ± 20 % ± 20 %	1	U2J (N750)				
						68 pF to 10 nF		2	Y5S, Y5U				
						1 nF to 10 nF		2	Y5V				
Vishay Draloric 		WKO	440 V _{AC}	300 V _{AC}	10 pF to 47 pF	± 10 % ± 20 %	1	U2J (N750)					
					Vishay Cera-Mite 		25Y	400 V _{AC}	250 V _{AC}	68 pF to 4.7 nF	± 10 % ± 20 %	2	Y5S, Y5U
										Vishay Draloric 		WYO	440 V _{AC}
Vishay Cera-Mite 		30LV	400 V _{AC}	300 V _{AC}	1.0 nF to 4.7 nF	± 10 % ± 20 %	2	Y5U					
					33 pF to 47 pF		1	U2J (N750)					
					68 pF to 4.7 nF		2	Y5S, Y5T, Y5U					
Vishay Cera-Mite 		30LVS	400 V _{AC}	250 V _{AC}	1.0 nF to 8.0 nF	± 20 %	2	Y5S					
	Vishay Cera-Mite 				30LV		400 V _{AC}	300 V _{AC}	1.0 nF to 10 nF	± 20 %	2	Y5U, Y5V	
									10 pF to 68 pF		1	C0G (P100), U2J (N750) P3K (N1500), R3L (N2000) S3L (N3300)	
Vishay Cera-Mite 	30LV	400 V _{AC}	300 V _{AC}	100 pF to 15 nF	± 10 % ± 20 %	2	X7R Y5U						
				Vishay Cera-Mite 		125L	400 V _{AC}	125 V _{AC}	1.0 nF to 50 nF	± 20 %	2	Y5V	
Vishay Draloric 	W1X	275 V _{AC}	-		4.7 nF to 22 nF				± 20 %		2	Y5V	
				Vishay Cera-Mite 	20VL	400 V _{AC}	-	9.0 nF to 100 nF		± 20 %	2	Y5V Z5U	



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Ceramic Capacitors for Automotive Applications

Leaded MLCCs

Best-in-class performance. Built for the most extreme automotive operating conditions, Vishay leaded MLCCs offer industry-high operating temperatures, the utmost electrical and mechanical robustness, and exceptional reliability.



- AEC-Q200 qualified
- PPAP documentation available
- High-reliability MLCC insert with noble metal electrodes, produced in a unique wet build process
- Compliant with ELV Directive



	Product Family	Series	Voltage	Capacitance	Tolerance	Class	Temperature Characteristics
Leaded MLCCs		Axial-Leaded MLCCs A...R Series	50 V _{DC} to 200 V _{DC}	100 pF to 1 μF	± 5 % ± 10 % ± 20 %	1 and 2	C0G X7R
			Features:		<ul style="list-style-type: none"> • High operating temperature up to 160 °C • Axial mounting style 		
		Radial-Leaded MLCCs K...R Series	50 V _{DC} to 200 V _{DC}	100 pF to 1 μF	± 5 % ± 10 % ± 20 %	1 and 2	C0G X7R
		Features:		<ul style="list-style-type: none"> • High operating temperature up to 160 °C • Radial mounting style • Crimp and straight leadstyles 			
	High Operating Temperature Radial-Leaded MLCCs K...H Series	50 V _{DC} to 200 V _{DC}	100 pF to 1 μF	± 5 % ± 10 % ± 20 %	1 and 2	C0G X0U	
		Features:		<ul style="list-style-type: none"> • High operating temperature up to 175 °C • Radial mounting style • Crimp and straight leadstyles 			

Automotive Safety Capacitors

The capacitors customers trust. Vishay’s automotive ceramic safety capacitors offer a market-leading lifetime to ensure proper function in safety-related applications such as on-board chargers and battery management systems in electric cars and plug-in hybrid electric vehicles (PHEV).



- AEC-Q200 qualified
- IEC 60384-14, X1/Y2 safety classification
- PPAP documentation available
- 3000 temperature cycles from -55 °C to +125 °C
- Compliant with ELV Directive



	Product Family	Series	Voltage	Capacitance	Tolerance	Class	Temperature Characteristics
X1 / Y2		AY2 Series	300 V _{DC} to 440 V _{DC}	10 pF to 4700 pF	± 10 % ± 20 %	1 and 2	N750 (U2J) Y5S, Y5U
			Features:		<ul style="list-style-type: none"> • Vertical (inline) kinked or straight leads • Single-layer AC disc safety capacitors 		

This document can be found at www.vishay.com/doc?49177