

Large Capacitance MLCCs (Large Size)

Features

[High Reliability]



- Stable X7R, X7S Dielectrics
- 0805 – 1210 inch / 2012 – 3225mm
- RoHS Compliant

High Power MLCCs (Ni COG based)

Features

[High Temperature & High Voltage]

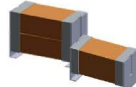


- High Temperature Operation to 150°C
- RoHS Compliant
- Highly Stable Over Temperature
- No piezoelectric noise

High Power MLCCs (X7T-Metal frame)

Features

[Superior DC Bias]



- Superior DC bias characteristics
- Excellent ripple current characteristics
- Double-stacked structure available

Product Family

Part Number	Size		WVDC	Dielectric Material	Capacitance
	EIA (inch)	JIS (mm)			
ACS05X06N 1 0 0 KNLG*	0805	2012	6.3V	X7R	~10uF
ACS05X06N 2 2 0 KNLG	0805	2012	6.3V	X7S	~22uF
ACS05X10N 2 2 0 KNLG	0805	2012	10V	X7S	~22uF
ACS05X18N 1 0 0 KNLG	0805	2012	16V	X7R	~10uF
ACS05X25N 1 0 0 KNLG	0805	2012	25V	X7R	~10uF
AC205X35N 4 7 5 KNLG	0805	2012	35V	X7S	~4.7uF
ACS05X50N 1 0 5 KNLG	0805	2012	50V	X7R	~1.0uF
AC205X50N 4 7 5 KNLG	0805	2012	50V	X7S	~4.7uF
AC205X18N 1 0 0 KNLG	0805	2012	100V	X7S	~1.0uF
ACS06X18N 1 0 0 KNLG	1206	3216	10V	X7R	~10uF
AC206X18N 2 2 0 KNLG	1206	3216	10V	X7S	~22uF
AC206X18N 2 2 0 KNLG	1206	3216	16V	X7R	~22uF
ACS06X25N 1 0 0 KNLG	1206	3216	25V	X7R	~10uF
ACS06X35N 1 0 0 KNLG	1206	3216	35V	X7R	~10uF
ACS06X50N 4 7 5 KNLG	1206	3216	50V	X7R	~4.7uF
AC206X18N 4 7 5 KNLG	1206	3216	100V	X7S	~4.7uF
ACS10X18N 4 7 5 KNLG	1210	3225	10V	X7R	~47uF
ACS10X18N 4 7 5 KNLG	1210	3225	16V	X7R	~47uF
ACS10X25N 2 2 0 KNLG	1210	3225	25V	X7R	~22uF
ACS10X35N 1 0 0 KNLG	1210	3225	35V	X7R	~10uF
ACS10X50N 1 0 0 KNLG	1210	3225	50V	X7R	~10uF
AC210X18N 1 0 0 KPLG	1210	3225	100V	X7S	~10uF

*G grade is for industrial and telecommunication
*A grade is for automotive application

Applications

- EV Powerline
- DC/DC converter
- High Voltage DC-Link, Snubber



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Product Family

Part Number	Size		WVDC	Capacitance @ 1KHz [nF]
	EIA (inch)	JIS (mm)		
ACC06X1CN 1 0 2 JNLA	1206	3216	1,000V	~ 1.0
ACC10X2BN 4 7 3 JNLA	1210	3225	200V	~.47
ACC20X5BN 1 0 3 JNTA	2220	5750	500V	~ 10
ACC20X1CN 6 0 3 JNTA			1000V	~ 6.8

-APC: Feedthru Capacitor

Applications

- Automotive Powertrains & Industrial Power Systems

- Switching Mode Power Supplies
- High Voltage Coupling
- Snubber Circuits
- Input & Output Filtering



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Product Family

Part Number	Size		WVDC	Capacitance @ 1KHz [nF]	Type
	EIA (inch)	JIS (mm)			
AC305X2BN 1 0 3 KNLA	0805	2012	250	~0.1	
AC306X2BN 2 2 3 KNLA	1206	3216	250	~0.22	
AC306X4BN 1 0 3 KNLA	1206	3216	450	~0.1	
AC306X6BN 4 7 0 KNLA	1206	3216	630	~0.047	
AC310H2BN 3 3 3 KNLA	1210	3225	250	~0.33	
AC310K4BN 2 2 3 KNLA	1210	3225	450	~0.22	
AC310K6BN 1 5 3 KNLA	1210	3225	630	~0.15	
AC320M2BN 2 2 3 KNLA	2220	5750	250	~2.2	
AC320M4BN 1 0 5 KNLA	2220	5750	450	~1.0	
AC320M6BN 6 0 1 KNLA	2220	5750	630	~0.6	
AC320P2BN 2 2 5 KMLA	2220	5750	250	~2.2	Metal Frame
AC320P4BN 1 0 5 KMLA	2220	5750	450	~1.0	
AC320P6BN 6 0 1 KMLA	2220	5750	630	~0.6	
AC320R2BN 3 3 5 MMLA	2220	5750	250	~3.3	Metal Frame
AC320R4BN 2 2 5 MMLA	2220	5750	450	~2.2	
AC320R6BN 1 2 5 MMLA	2220	5750	630	~1.2	

Applications

- Automotive Infotainment & IT Power Systems



- Switching Mode Power Supplies
- Voltage Multiplier Circuitry
- Input & Output Filtering

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Overview

High Q MLCCs



- 01005 inch / 0402 mm
- 0201 – 0805 inch / 0603 – 2012 mm for telecommunication
- 1111 – 3838 inch / 2828 – 9797 mm for RF power
- COG Dielectric
- Low ESR

Broadband DC Blocks



- 01005-0402 inch / 0402 – 1005 mm
- Up to 70 GHz
- X7R/X7S/X5R
- High WVDC

3 Terminal Monoblock EMI Filters



- 0603-1806 inch / 1608 – 4516 mm
- High Dielectric Ceramic
- Multilayer & Bulk Structures
- 16 Volts to 100 Volts

Large Capacitance MLCCs (Small Size)



- 0201 – 0603 inch / 0603 – 1608mm
- High Reliability
- X7R, X7S dielectric base

Large Capacitance MLCCs (Large Size)



- 0805 – 1210 inch / 2012 – 3225mm
- High Reliability
- X7R, X7S dielectric base

High Power MLCCs (Ni COG based)



- 1206 – 3640 inch / 3216 – 90100mm
- Highly temp. & DC Bias stability
- 200V – 2kV

High Power MLCCs (X7T Based – Metal frame)



- 1206 – 2220 inch / 3216 – 5750mm
- Excellent ripple current characteristics
- Pseudo-cubic para-electrics material

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High Q MLCCs

Features



[Low ESR]

- Various Sizes
- High Working Voltages
- RoHS Compliant
- High Self Resonant Frequencies
- Stable COG Dielectric
- Non-Mag and Metal frame option available

Product Family

Part Number	Size		WVDC (V)	Capacitance Range	Operating Temperature (°C)
	EIA (inch)	JIS (mm)			
A60W0R8AT02ST	01005	0402	25	0.6 – 1.6pF	125°C
A6Z100JT00T	0201	0603	200	0.1–10pF	0:125°C 4:200°C
A6L100JT00T	0402	1005	200	0.1–27pF	0:125°C 4:200°C
A6S100JT250XT	0603	1608	250	0.1–100pF	0:125°C 4:200°C
A6PF100JT250XT	0805	2012	250	0.1–240pF	0:125°C 4:200°C
A80B100JT500XT	1111	2828	50–500	1.0–1000pF	125°C
A80C100JT500XT	2325	5864	100–500	0.1–1000pF	125°C
A80E100JT500XT	3838	9797	500–3600	0.5–5100pF	125°C

Applications

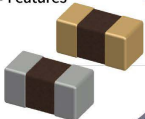


- Cellular Base Stations
- Satellite Communications
- 5G CPE
- Broadband Wireless Services
- WiMAX (802.16)

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Broadband DC Blocks

Features



[Proprietary Design]

- Wide Range of Sizes
- Low Insertion Loss
- Flat response to 70 GHz
- RoHS Gold or RoHS Tin Plating
- High WVDC Up to 50 Volts

Product Family

Part Number	Size		Dielectric Material	WVDC (V)	Capacitance	Frequency Range	Termination Option (°C)
	EIA (inch)	JIS (mm)					
ABCUC06100X03M+DG	01005	0402	X6S	6.3	0.01uF	70GHz	N: Sn G: Au
ABCUC06100X473M+DG	01005	0402	X6S	6.3	0.047uF	70GHz	N: Sn G: Au
ABCUC04100X04M+DG	01005	0402	X6S	4	0.1uF	70GHz	N: Sn G: Au
ABCUC06F00X04M+DG	01005	0402	X5R	6.3	0.1uF	70GHz	N: Sn G: Au
ABCUC16201X104K+DG	0201	0603	X7S	16	0.1uF	70GHz	N: Sn G: Au
ABCUC16201X103P+DG	0201	0603	X7S	16	0.01uF	40GHz	N: Sn G: Au
ABCUC16502X104K+DG	0402	0603	X7R	16	0.1uF	40GHz	N: Sn G: Au
ABCUC0502X104K+DG	0402	1005	X7R	50	0.1uF	40GHz	N: Sn G: Au

Applications



- Optical Communication Systems
- High Speed Digital Data

- SFP, SFP+

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3 Terminal Filters

Features



[Wideband EMI Solution]

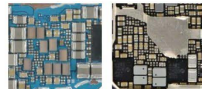
- Various Sizes
- High Current
- Low ESL
- RoHS Compliant

Product Family

Part Number	Size		WVDC	Rated Current	Capacitance
	EIA (inch)	JIS (mm)			
AFC16503A222MCD	0603	1608	16V	1A	0.022uF
AFC16503A104MPD	0603	1608	16V	2A	0.1uF
AFC25506C155MPL	1806	4516	225V	6A	1.5uF
AFC0506C105SPL	1806	4516	50V	6A	1.0uF

- AFC: Feedthru Capacitor

Applications



- EMI Filter for Power & Signal Integrity

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Large Capacitance MLCCs (Small Size)

Features



[High Reliability]

- Stable X7R, X7S Dielectrics
- 0201 – 0603 inch / 0603 – 1608mm
- RoHS Compliant

Product Family

Part Number	Size		WVDC	Dielectric Material	Capacitance
	EIA (inch)	JIS (mm)			
ACS01X06N104KNDG*	0201	0603	6.3V	X7R	1.0uF
ACS01X10N104KNDG	0201	0603	10V	X7R	1.0uF
ACS01X16N104KNDG	0201	0603	16V	X7R	1.0uF
ACS02X06N 2.5 KNDG	0402	1005	6.3V	X7R	~2.2uF
ACS02X10N 2.5 KNDG	0402	1005	10V	X7R	~2.2uF
ACS02X16N 2.5 KNDG	0402	1005	16V	X7S	~1.6uF
ACS02X25N 1.0 4 KNDG	0402	1005	25V	X7R	~0.1uF
ACS02X50N 1.0 4 KNDG	0402	1005	50V	X7R	~0.1uF
ACS02X10N 1.0 3 KNDG	0402	1005	100V	X7R	~0.01uF
ACS01X06N 1.0 6 KNDG	0603	1608	6.3V	X7R	~10uF
ACS03X10N 4.7 5 KNDG	0603	1608	10V	X7R	~4.7uF
ACS03X16N 4.7 5 KNDG	0603	1608	16V	X7R	~4.7uF
ACS03X25N 1.0 5 KNDG	0603	1608	25V	X7R	~1.0uF
ACS03X50N 4.7 4 KNDG	0603	1608	50V	X7R	~0.47uF
ACS03X10N 1.0 4 KNDG	0603	1608	100V	X7R	~0.1uF
ACS03X20F 1.0 3 KNDG	0603	1608	200V	X7R	~0.01uF

* "G" grade is for industrial and telecommunication
"X" grade is for automotive application

Applications



- Mobile, Semiconductor
- Low voltage DC/DC converter
- Power control units
- Low voltage DC-link, rectifier circuits

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