

MCV high performance ceramic filters, duplexers, triplexers and multiplexers are designed and manufactured using proprietary high-quality factor (Q) ceramic materials in compact and rugged package. We offer custom design and quick-turn delivery. Our ceramic filters are widely used in commercial wireless, UHF/VHF, public safety, GPS, satellite receivers and high-reliability defense communication equipment.

APPLICATIONS

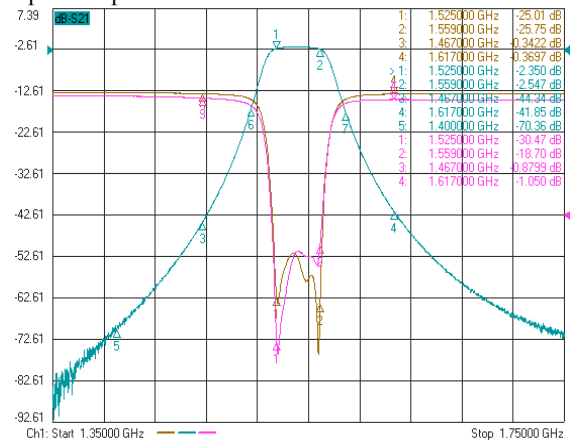
- AMPS/ DCS/PCS
- DBS/BV-B-T
- GSM/ CDMA/WCDMA/ LTE
- GPS (L1, L2 and L5)
- ISM 915MHz, ISM 2.4GHz, ISM 5.8GHz
- MMDS
- SATCOM
- WiFi/WiMAX/WLL
- UHF/VHF/700/800 Public Safety

FEATURES

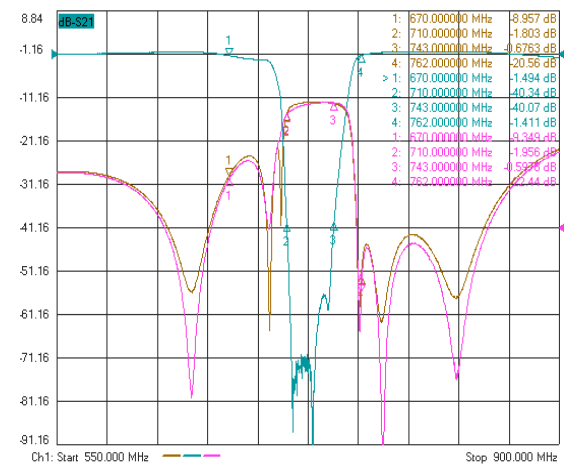
- Small size/low profile
- High Q - Low insertion loss
- Band pass and band reject filters
- Center frequency from 300MHz to 8GHz
- Bandwidths from 0.1% to 30%
- Chebyshev transfer function design
- High selectivity cross-coupling
- Excellent temperature and mechanical stability
- Repeatable and reliable performance
- Suitable for SMT reflow soldering
- Tape and reel packaging
- Custom design

TYPICAL PERFORMANCE

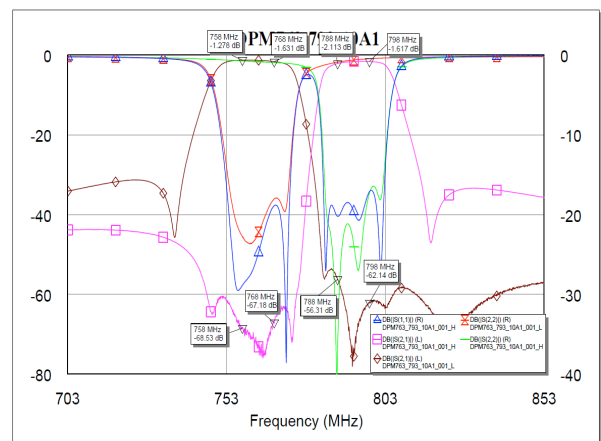
Bandpass Response



Band reject Response



Duplexer Response



Mono-Block Bandpass/Dual Bandpass Filters

Part Number	Frequency Range (MHz)	I.L. (dB) max	VSWRmax R.L. min	Attenuation(dB)min@MHz	Dimensions (LxWxH)mm
BPM860-18A1	851~869	2.3	15.0	10@837.5,35@940	13.5x12.5x6.0
BPM881-25G1	869~894	3.0	15.0	60@824~849	44.0x20.5x9.5
BPM1485-100A1	1435~1535	1.5	15.0	40@1585	26.5x13.5x9.5
BNM1745-70A1	1710~1780	2.0	15.0	65@2110~2180	40.5x10.0x8.1
BNM2441-83A1	2400~2483	2.0	15.0	18@2100~2300,2600~2800 25@1200~1250,3600~3750	8.5x6.6x3.3
BNM5787-125A1	5725~5850	2.8	2.0:1	35@5350,25@5475	8.5x4.5x2.9
DBPM780-942-4535A6	758~803 925~960	2.2	15.0	35@880~915 35@703~748	38.0x42.0x15.4

Discrete Resonator Bandpass Filters

Part Number	Frequency Range (MHz)	I.L. (dB) max	VSWR max R.L. min	Attenuation(dB)min@MHz	Dimensions (LxWxH)mm
BPX473-3A1	472~475	6.0@Fc	15.0	70@DC~458,488~1000 50@458~465,483~488	44.0x23.0x9.5
BPX781-27A1	768~795	1.5	1.5:1	40@713~740	42.0x20.0x9.0
BPX866-3A1	865~868	3.0	14	40@50~850,40@885~2500	50.8x12.7x9.0
BPX1505-105A1	1453~1558	2.5	1.5:1	25@1350,40@1750~3000	22.4x14.0x5.0
BPX1542-34A1	1525~1559	3.3	14	37@1467,1617	31.8x12.7x8.2
BPX2800-200A1	2700~2900	1.8	15.0	30@2630,2970;13@2670,2930	38.1x14.0x9.0

Duplexers

Part Number	Frequency Range (MHz)	I.L. (dB) max	VSWR	Attenuation(dB)min@MHz	Dimensions (LxWxH)mm
DPM836-881-25A1	L: 824 ~849	2.0	15.0	60@869 ~894	65.0x20.0x11.2
	H: 869 ~894			60@824 ~849	
DNM897-942-35A1	L: 880~915	3.5	14.0	50@925~960	40.5x14.0x8.0
	H: 925~960			50@880~915	
DPM1747-1842-75C1	L: 1710~1785	2.5	14.0	50@1805~1880	44.0x13.5x9.5
	H: 1805~1880			50@1710~1785	
DPM1950-2140-60A1	L: 1920~1980	2.0	15.0	55@2110~2170	30.0x8.8x4.9
	H: 2110~2170			55@1920~1980	
DNM2535-2655-70A1	L: 2500~2570	2.2	16.0	50@2620~2690	40.0x9.5x8.0
	H: 2620~2690			50@2500~2570	

Band Reject Filters

Part Number	Frequency Range (MHz)	I.L. (dB) max	VSWR max R.L. min	Attenuation(dB)min@MHz	Dimensions (LxWxH)mm
NPX781-27A1	713~740	1.0	15.0	20@768~795	76.2x46.0x25.4
NPX820-59A1	DC~787	4.0	10.0	15@791~850; 23@792	33.0x17.0x9.0
NPX2535-104B1	2620~2690	1.0	1.7:1	40@2500~2570	38.6x12.7x8.9

High Power Filters and Duplexers

Part Number	Frequency Range (MHz)	I.L. (dB) max	VSWR max R.L. min	Attenuation(dB)min@MHz	Dimensions (LxWxH)mm
BHPM836-25A1	824~849	1.5	18.0	40@869~894	45.0x23.0x16.3
BHTX915-20A1	905~925	3.0	10.0	40@840, 1000 30@898, 931	97.0x12.7x21.0
BHPM947-25A1	935~960	1.5	18.0	40@890~915	45.0x23.0x16.3
DHMP417-427-05A1	L: 415~420	3.0	15.0	55@425~430	80.0x22.0x16.3
	H: 425~430			55@415~420	
DHMP806-847-30A1	L: 791~821	2.5	15.0	35@832~862	79.5x22.0x16.5
	H: 832~862			35@791~821	
DHNM1760-1855-50A1	L: 1735~1785	2.0,3.0	18.0	50@1830~1880	58.5x9.5x9.3
	H: 1830~1880			65@1735~1785	
DHMP1950-2140-60B1	L: 1920~1980	1.0	15.0	60@2110~2170	83.0x15.0x17.7
	H: 2110~2170			60@1920~1980	

Multiplexers

Part Number	Frequency Range (MHz)	I.L. (dB) max	VSWR max R.L. min	Attenuation(dB)min@MHz	Dimensions (LxWxH)mm
MPM3-000001A1	698~716	3.0	15.0	45@728~757 58@869~894 30@1700~2200	90.0x34.0x10.0
	728~757	3.9	15.0	60@698~716 67@776~787 65@824~849 60@869~894 30@1700~2200	
	776~787	2.8	15.0	50@728~757 42@869~894 30@1700~2200	
MPX4-000004A1	800~900	1.0	15.0	30@1565~1575 30@1616~1626.5 30@2400~2500	76.2x63.5x25.4
	1565~1585	5.5	15.0	30@800~900 30@1616~1626.5 30@2400~2500	
	1616~1626.5	5.5	15.0	30@1565~1575 30@800~900 30@2400~2500	
	2400~2500	2.5	15.0	30@1565~1575 30@1616~1626.5 30@800~900	

ORDERING INFORMATION

Bandpass/Band Reject Filters

<u>BPM</u>	<u>1842-</u>	<u>75-</u>	<u>A1</u>
Filter Type	Centre Frequency (MHz)	Bandwidth (MHz)	Revision
BNM = Mono-Block Bandpass Filter Without PCB BPM = Mono-Block Bandpass Filter With PCB BPX = Discrete Resonator Bandpass Filter BTX = Discrete Resonator Pin Type Bandpass Filter BCM = Ceramic Encased Bandpass Filter NNM = Mono-Block Band Reject Filter Without PCB NPM = Mono-Block Band Reject Filter With PCB NPX = Discrete Resonator Band Reject Filter NCM = Ceramic Encased Band Reject Filter "BH" = High Power Bandpass Filter			

Dual Bandpass/Dual Band Reject Filters

<u>DBPM</u>	<u>836-</u>	<u>881-</u>	<u>25-</u>	<u>A1</u>
Filter Type	Band - 1 Centre Frequency (MHz)	Band - 2 Centre Frequency (MHz)	Band - 1 Bandwidth (MHz)	Revision
DBPM = Mono-Block Dual Bandpass Filter With PCB DBPX = Discrete Resonator Dual Bandpass Filter DNPM = Mono-Block Dual Band Reject Filter With PCB DNPX = Discrete Resonator Dual Band Reject Filter				

Duplexers

<u>DPM</u>	<u>1732-</u>	<u>2132-</u>	<u>45</u>	<u>B1</u>
Filter Type	Lower Band Centre Frequency (MHz)	High Band Centre Frequency (MHz)	Lower Band Bandwidth (MHz)	Revision
DNM = Mono-Block Duplexer Without PCB DPM = Mono-Block Duplexer With PCB DPX = Discrete Resonator Duplexer DTX = Discrete Resonator Pin Type Duplexer DCM = Ceramic Encased Duplexer "DH" = High Power Duplexer				

Multiplexers

<u>MPM</u>	<u>3-</u>	<u>000001</u>	<u>A1</u>
Filter Type	Channel Number	Sequential Number	Revision
MPM = Mono-Block Multiplexer MPX = Discrete Resonator Multiplexer MCM = Ceramic Encased Multiplexer			
	3 - Triplexer		
	4 - Quadraplexer		
	5 - Pentaplexer		

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