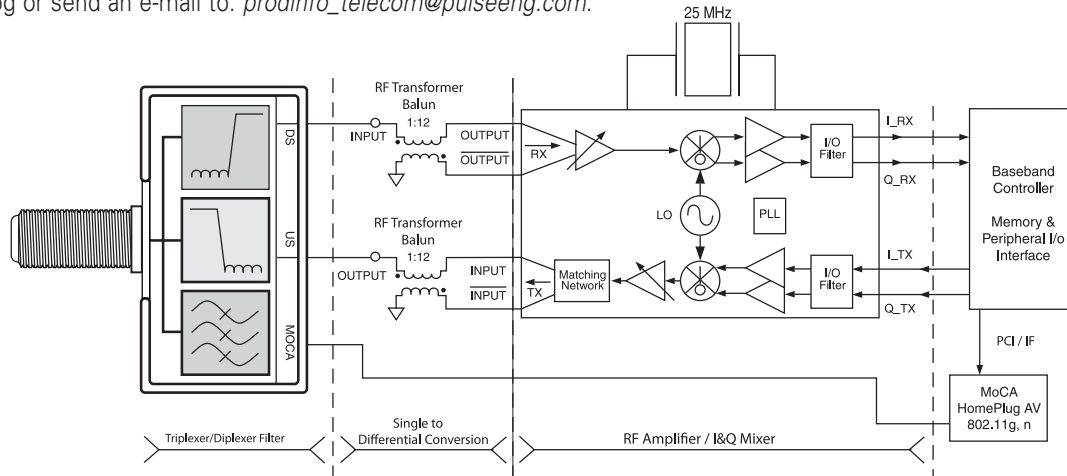




Pulse offers a comprehensive line of RF magnetic components for use in CATV/ Hybrid Fiber Coax applications for set-top boxes and gateway devices, for TELCO TV in gateway devices, and FTTP ONT (optical network termination) units as well as emerging in-home networking products. RF components are also used in medical and industrial devices and equipment.

Platforms consist of diplexer filters that can also include integrated F-connectors, transformers/baluns, single-stage filters, directional couplers and RF splitter/ combiners. Pulse provides both surface mount and through hole components that have minimal insertion loss and excellent return loss to ease the development and manufacturing of today's RF network equipment.

NOTE: RoHS versions of some of the products offered in this section are available. To order, add NL at the end of the part number. For more information, call and ask for "Broadband RF and Wireless Applications." Local telephone numbers are on the back cover of this catalog or send an e-mail to: prodinfo_telecom@pulseeng.com.



RF, BROADBAND, CATV, TELCO TV APPLICATIONS

DIPLEX FILTERS with Integrated F-Connectors

Part Number	Low Pass (MHz)	High Pass (MHz)	Data Sheet
DOCSIS System			
C6026	5-44	58-860	C236
CX6026	5-44	58-860	C236
C6035	5-42	88-860	C236
C6036NL	10-55	90-770	C236
C6086NL	5-65	108-860	C236

MoCA IC Cross Reference

IC House	RF Front End	Baseband Controller	Triplexer	Diplexer	RF Transformer Balun
Entropic	EN1010	EN2x10 EN2x11 EN3x30 EN3x11	C6113NL	C6058 CX6155NL C6131SNL C6039	CX2163LNL

DIPLEX FILTERS with Integrated F-Connectors

Part Number	Low Pass (MHz)	High Pass (MHz)	Data Sheet
MoCA Application			
C6039	5-860	975-1525	C250
C6131SNL	5-1002	1125-1525	C250
C6058	975-1025	1125-1525	C252
C6141NL	975-1025	1125-1525	C252
CX6077	5-860	975-1025	C253
CX6155NL	5-870	975-1525	C253




TRIPLEX FILTERS with Integrated F-Connectors

Part Number	Low Pass (MHz)	Band Pass (MHz)	High Pass (MHz)	Data Sheet
C6113NL	5-42	54-1002	1125-1525	C257





Pulse has been a participating member







RF, BROADBAND, CATV, TELCO TV APPLICATIONS




Diplexer Filters					
Part Number	Frequency ¹ (MHz)	Insertion Loss (dB)	Return Loss (dB)	Package Style	Data Sheet
	5-42/52-750	1.5	18 or better	SMT	C202
C6001	5-42/52-870	<1.0	20 or better	SMT	C204
C6001L ³	5-42/52-870	<1.0	20 or better	SMT	C204
CX6006L ³	5-65/85-870	<1.2	16 or better	SMT	C213
CX6006	5-65/85-870	<1.2	18 or better	SMT	C213
	5-42/88-864	<1.0	14 or better	SMT	C211
CX6008 ¹	5-65/85-864	1.0 TYP	14/9	SMT	C216
CX6002 ¹	5-42/54-864	<1.5	14/9	SMT	C230
	5-42/54-864	<1.5	14/9	SMT	C248

1. Low Pass Port/High Pass Port
2. Leadless
3. L = Low cost

RF Splitter/Combiners: 2-Way, 0°					
Part Number	Frequency (MHz)	Isolation (dB TYP)	Return Loss (TYP)	Insertion Loss (dB TYP)	Data Sheet
	5-65	40	30	0.22	C212
CX4004L ²	5-65	40	30	0.22	C212
CX4012L ²	5-1000	20	16	0.65	C220
CX4012	40-1000	27	22	0.65	C220
C4036	5-1000	25	31	0.48	C241
	5-1000	25	26	0.65	C218
	96-864	25	9	1.7	C222
	5-1000	27	24	0.48	C223
CX4005	5-250	24	27	0.45	C226
CX4024	5-1000	30	30	0.8	C220

1. Differential splitter/combiner
2. L = Low cost


Directional Couplers					
Part Number	Frequency (MHz)	Z (Ω)	Coupling Nom. (dB ±0.5)	Mainline Loss (dB TYP)	Data Sheet
	5-900	75	10.0	1.1	A102
A5808	5-900	75	7.5	1.6	A102
A5809	5-900	75	12.0	0.9	A102
A5816	5-900	75	16.0	0.8	A102
A5908	5-900	75	7.5	1.6	A102
A5910	5-900	75	10.0	1.1	A102
A5912	5-900	75	12.0	0.9	A102
A5916	5-900	75	16.0	0.8	A102
	5-900	75	16.0	0.6	C207
	5-900	75	7.5	1.6	C243
CX3042	5-1000	75	6.0	1.76	C243
	10-1000	50	16.0	0.8	C234

Low Pass Filters					
Part Number	In/Out Impedance (Ω)	Passband (MHz)	Insertion Loss (dB MAX)	Return Loss (dB MIN)	Data Sheet
	75	5-42	1.0	18.0	B907
B5005	75	5-65	1.0	17.5	B907
	50	1-49	1.0	16.0	C208
	150	1-50	1.2	15.0	C209
C5003	150	1-80	1.2	15.0	C209
C5005	75	1-59.5	1.0	15.0	C209
CX5013	75	1-65	1.5	15.0	C209

SMT - Surface Mount Package THT - Through Hole Package

RF, BROADBAND, CATV, TELCO TV APPLICATIONS

RF Transformers/Baluns

Part Number	Impedance Ratio	Bandwidth (MHz TYP)			Data Sheet
		3 dB	2 dB	1 dB	
	1:4CT	0.100-500	0.150-390	.300-220	C200
C2020	1CT:1CT	0.150-210	.200-150	.350-90	C200
CX2038 ^{1,2}	1:1	—	Up to 1500	4.5-1000	C203
CX2039 ^{1,2}	1:1	—	Up to 1500	4.5-1000	C203
CX2040L ^{1,2}	1:1	1.5-500	2.5-400	5-350	C203
CX2041 ²	1:1	0.05-450	0.75-300	0.1-200	C203
CX2043L ^{1,2}	1:1.5	—	—	1-1000	C203
CX2044L ^{1,2}	1:1.5	—	1-500	5-100	C203
CX2039	1:1 (50 Ω)	—	Up to 1500	4.5-1000	C203
CX2038	1:1 (75 Ω)	—	Up to 1500	4.5-1000	C203
CX2045L ^{1,2}	1:2	—	—	3-300	C203
CX2047L ^{1,2}	1:4	—	.5-300	1.5-100	C203
CX2047 ²	1:4CT	—	0.50-300	1.5-100	C203
CX2049L ^{1,2}	1:8	2-500	—	—	C203
CX2029	36:1CT	0.05-21	—	—	C203
CX2155	1:1	—	—	5-500	C238
CX2163LNL ^{3,4}	1:1	800-1900	—	900-1400	C203



CX2050	1:1	0.15-400	—	—	C206
CX2054	1:4CT	0.20-350	—	—	C206
CX2059	1:9	0.15-200	—	—	C206
CX2052	1:1CT	0.08-200	—	—	C206



CX2068	1:12.25	0.1-150	0.5-100	1.5-50	C206
CX2060	1:1	0.15-400	—	—	C206
CX2062	1:1CT	0.08-200	—	—	C206
CX2064	1:4CT	0.20-350	—	—	C206
CX2065	1:4CT	0.02-250	—	—	C206



CX2032 ^{2,3}	1:4CT	—	—	5-165	C210
C2042 ²	1CT:1CT	0.30-300	0.40-200	0.5-90	C210
CX2157 ²	1:1CT	0.4-800	0.5-700	1-600	C232
CX2158 ²	1:4CT	2-775	3-600	6-250	C232
CX2141 ²	4CT:1CT	0.3-300	0.4-200	0.5 - 90	C232
CX2142 ²	1:1	—	—	50-870	C232
C2160 ²	2.65:1	Up to 130	Up to 100	0.40-70	C232






CX2078	1:1	—	—	5-500	C215
CX2081	1:1.5 CT	5.0-125	—	—	C215
CX2156	1:1	—	—	2.3-2700	C215
CX2148	1:1	—	—	5-500	C224
CX2148A	1:1	—	—	5-500	C224
C2073 ²	1:4CT	—	1-500	1-200	C224
C2073A ²	1:4CT	—	1-500	1-200	C224
CX2072	1:1	—	Up to 1500	10-1000	C227
CX2076 ²	1:1	—	Up to 2150	—	C233

1. L = low cost
2. Leadless

3. Low profile
4. NL = lead free

Continued next column


RF Transformers/Baluns (continued)

Part Number	Impedance Ratio	Bandwidth (MHz TYP)			Data Sheet	
		3 dB	2 dB	1 dB		
	CX2149 ²	1:1	—	Up to 1500	10-1200	C217
CX2024 ²	1:1	—	Up to 1500	10-1200	C217	
	CX2147	1:1CT	—	—	1-160	C242
CX2074	1:4CT	—	—	5-170	C242	
	C2139NL ^{2,4}	1:1	—	—	5-1000	C244

1. L = low cost
2. Leadless

3. Low profile
4. NL = lead free


Fibre Channel (SAN), Dual Serial Data Interface Transformers

Part Number	Turns Ratio	Package Style ¹	Package	Data Sheet	
			L/W/H (in.) *		
	A6801 ²	1CT:1CT	16-pin SOIC	.500/.295/.220	A100
A6802	1:1	16-pin SOIC	.500/.295/.220	A100	
PE-65507NL ²	1:1	16-pin SOIC	.500/.270/.220	A101	
PE-65508NL ²	1:1	16-pin SOIC	.500/.270/.220	A101	

1. SOIC = 50 mil pitch lead spacing

2. NL = Lead-free

IEEE 1394, Common Mode Choke

Part Number	No. of Lines	Inductance OCL (μH MIN)	Package	Data Sheet	
			L/W/H (in.) *		
	A1801	2	3	.290/.240/.150	A104