

Multilayer Ceramic Chip Capacitors

May 23, 2024
Simple Model

Commercial Grade, Soft Termination / C2012 series (1/4)

Circuit Diagram



Circuit Parameters

Part No.	C1[pF]	L1[nH]	R1[ohm]	R2[Gohm]
C2012C0G2W101J060AE	100	0.480	0.1984	10.0
C2012C0G2W151J060AE	150	0.480	0.1193	10.0
C2012C0G2W221J060AE	220	0.480	0.1358	10.0
C2012C0G2W331J060AE	330	0.480	0.1055	10.0
C2012C0G2W471J060AE	470	0.480	0.0853	10.0
C2012C0G2W681J060AE	680	0.480	0.0531	10.0
C2012C0G2W102J060AE	1,000	0.480	0.0478	10.0
C2012X7R2E102K085AE	1,000	0.480	0.2806	10.0
C2012X7R2E102M085AE	1,000	0.480	0.2806	10.0
C2012X7R2A102K085AE	1,000	0.480	0.2806	10.0
C2012X7R2A102M085AE	1,000	0.480	0.2806	10.0
C2012C0G2W122J060AE	1,200	0.480	0.0436	10.0
C2012C0G2W152J085AE	1,500	0.480	0.0384	10.0
C2012C0G2W182J085AE	1,800	0.480	0.0184	10.0
C2012C0G2W222J085AE	2,200	0.480	0.0319	10.0
C2012X7R2E222K085AE	2,200	0.480	0.2040	10.0
C2012X7R2E222M085AE	2,200	0.480	0.2040	10.0
C2012X7R2A222K085AE	2,200	0.480	0.2040	10.0
C2012X7R2A222M085AE	2,200	0.480	0.2040	10.0
C2012C0G2W272J125AE	2,700	0.480	0.0295	10.0
C2012C0G2E332J085AE	3,300	0.480	0.0273	10.0
C2012C0G2W332J125AE	3,300	0.480	0.0260	10.0
C2012C0G2W392J125AE	3,900	0.480	0.0245	10.0
C2012X7R2E472K085AE	4,700	0.480	0.1199	10.0
C2012X7R2E472M085AE	4,700	0.480	0.1199	10.0
C2012X7R2A472K085AE	4,700	0.480	0.1199	10.0
C2012X7R2A472M085AE	4,700	0.480	0.1199	10.0
C2012C0G2E472J125AE	4,700	0.480	0.0235	10.0
C2012C0G2E562J125AE	5,600	0.480	0.0231	10.0
C2012C0G2E682J125AE	6,800	0.480	0.0197	10.0
C2012X7R2A103K085AE	10,000	0.480	0.0798	10.0
C2012X7R2A103M085AE	10,000	0.480	0.0798	10.0
C2012X7T2W103K085AE	10,000	0.480	0.0737	10.0
C2012X7T2W103M085AE	10,000	0.480	0.0737	10.0
C2012X7R2E103K125AE	10,000	0.480	0.0857	10.0
C2012X7R2E103M125AE	10,000	0.480	0.0857	10.0

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Circuit Diagram



Circuit Parameters

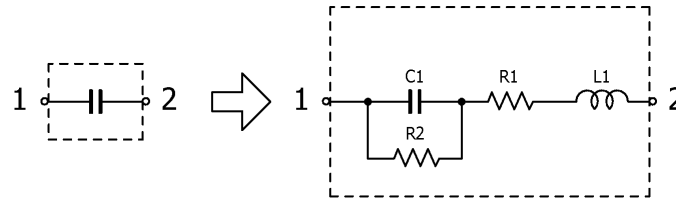
Part No.	C1[pF]	L1[nH]	R1[ohm]	R2[Gohm]
C2012C0G2A153J085AE	15,000	0.480	0.0150	10.0
C2012C0G1H153J085AE	15,000	0.480	0.0150	10.0
C2012C0G2A223J125AE	22,000	0.480	0.0157	10.0
C2012C0G1H223J125AE	22,000	0.480	0.0157	10.0
C2012X7R2E223K125AE	22,000	0.480	0.0653	10.0
C2012X7R2E223M125AE	22,000	0.480	0.0653	10.0
C2012X7R2A223K125AE	22,000	0.480	0.0478	10.0
C2012X7R2A223M125AE	22,000	0.480	0.0478	10.0
C2012X7T2W223K125AE	22,000	0.480	0.0588	10.0
C2012X7T2W223M125AE	22,000	0.480	0.0588	10.0
C2012X8R2A223K125AE	22,000	0.480	0.0304	10.0
C2012X8R2A223M125AE	22,000	0.480	0.0304	10.0
C2012C0G2A333J125AE	33,000	0.480	0.0130	10.0
C2012C0G1H333J125AE	33,000	0.480	0.0130	10.0
C2012X7R2A473K125AE	47,000	0.480	0.0305	10.0
C2012X7R2A473M125AE	47,000	0.480	0.0305	10.0
C2012X7T2W473K125AE	47,000	0.480	0.0280	10.0
C2012X7T2W473M125AE	47,000	0.480	0.0280	10.0
C2012X7T2E473K125AE	47,000	0.480	0.0280	10.0
C2012X7T2E473M125AE	47,000	0.480	0.0280	10.0
C2012X8R2A473K125AE	47,000	0.480	0.0325	10.0
C2012X8R2A473M125AE	47,000	0.480	0.0325	10.0
C2012X8R2A683K125AE	68,000	0.480	0.0258	7.35
C2012X8R2A683M125AE	68,000	0.480	0.0258	7.35
C2012X7R2A104K125AE	100,000	0.480	0.0150	5.00
C2012X7R2A104M125AE	100,000	0.480	0.0150	5.00
C2012X7T2E104K125AE	100,000	0.480	0.0198	5.00
C2012X7T2E104M125AE	100,000	0.480	0.0198	5.00
C2012X8R1H104K125AE	100,000	0.480	0.0227	5.00
C2012X8R1H104M125AE	100,000	0.480	0.0227	5.00
C2012X8R1E154K085AE	150,000	0.480	0.0211	3.33
C2012X8R1E154M085AE	150,000	0.480	0.0211	3.33
C2012X8R1H154K125AE	150,000	0.480	0.0207	3.33
C2012X8R1H154M125AE	150,000	0.480	0.0207	3.33
C2012X7S2A224K085AE	220,000	0.480	0.0416	2.27
C2012X7S2A224M085AE	220,000	0.480	0.0416	2.27

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Circuit Diagram



Circuit Parameters

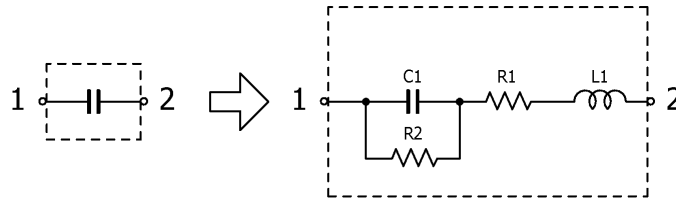
Part No.	C1[pF]	L1[nH]	R1[ohm]	R2[Gohm]
C2012X7R1H224K125AE	220,000	0.480	0.0155	2.27
C2012X7R1H224M125AE	220,000	0.480	0.0155	2.27
C2012X8R1H224K125AE	220,000	0.480	0.0165	2.27
C2012X8R1H224M125AE	220,000	0.480	0.0165	2.27
C2012X8R1E224K125AE	220,000	0.480	0.0145	2.27
C2012X8R1E224M125AE	220,000	0.480	0.0145	2.27
C2012X8R1E334K125AE	330,000	0.480	0.0096	1.52
C2012X8R1E334M125AE	330,000	0.480	0.0096	1.52
C2012X7R1H474K125AE	470,000	0.480	0.0091	1.06
C2012X7R1H474M125AE	470,000	0.480	0.0091	1.06
C2012X7S2A474K125AE	470,000	0.480	0.0104	1.06
C2012X7S2A474M125AE	470,000	0.480	0.0104	1.06
C2012X8R1E474K125AE	470,000	0.480	0.0092	1.06
C2012X8R1E474M125AE	470,000	0.480	0.0092	1.06
C2012X8R1E684K125AE	680,000	0.480	0.0097	0.147
C2012X8R1E684M125AE	680,000	0.480	0.0097	0.147
C2012X8R1C684K125AE	680,000	0.480	0.0097	0.147
C2012X8R1C684M125AE	680,000	0.480	0.0097	0.147
C2012X7R1H105K125AE	1,000,000	0.480	0.0062	0.500
C2012X7R1H105M125AE	1,000,000	0.480	0.0062	0.500
C2012X7R1V105K125AE	1,000,000	0.480	0.0062	0.500
C2012X7R1V105M125AE	1,000,000	0.480	0.0111	0.500
C2012X7S2A105K125AE	1,000,000	0.480	0.0078	0.500
C2012X7S2A105M125AE	1,000,000	0.480	0.0078	0.500
C2012X8R1E105K125AE	1,000,000	0.480	0.0077	0.100
C2012X8R1E105M125AE	1,000,000	0.480	0.0077	0.100
C2012X8R1C105K125AE	1,000,000	0.480	0.0077	0.100
C2012X8R1C105M125AE	1,000,000	0.480	0.0077	0.100
C2012X7R1H225K125AE	2,200,000	0.480	0.0055	0.227
C2012X7R1H225M125AE	2,200,000	0.480	0.0055	0.227
C2012X7R1V225K125AE	2,200,000	0.480	0.0127	0.227
C2012X7R1V225M125AE	2,200,000	0.480	0.0127	0.227
C2012X7R1E225K125AE	2,200,000	0.480	0.0072	0.227
C2012X7R1E225M125AE	2,200,000	0.480	0.0072	0.227
C2012X7R1H475K125AE	4,700,000	0.480	0.0051	0.106
C2012X7R1V475K125AE	4,700,000	0.480	0.0048	0.106

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Circuit Diagram



Circuit Parameters

Part No.	C1[pF]	L1[nH]	R1[ohm]	R2[Gohm]
C2012X7R1V475M125AE	4,700,000	0.480	0.0048	0.106
C2012X7R1E475K125AE	4,700,000	0.480	0.0024	0.106
C2012X7R1E475M125AE	4,700,000	0.480	0.0024	0.106
C2012X7R1C475K125AE	4,700,000	0.480	0.0069	0.0210
C2012X7R1C475M125AE	4,700,000	0.480	0.0069	0.0210
C2012X8L1E475K125AE	4,700,000	0.480	0.0051	0.106
C2012X7R1A106K125AE	10,000,000	0.480	0.0041	0.0100
C2012X7R1A106M125AE	10,000,000	0.480	0.0041	0.0100
C2012X7S1E106K125AE	10,000,000	0.480	0.0040	0.0500
C2012X8L1A106K125AE	10,000,000	0.480	0.0040	0.0100
C2012X5R1A226M125AE	22,000,000	0.480	0.0036	0.00400