

SMT Isolators and Circulators

FEATURES:

- ❖ Frequency coverage: UHF to 18 GHz
- ❖ Relative bandwidth 30% max
- ❖ Low insertion loss and high isolation
- ❖ Single magnet and compact design

APPLICATIONS:

- ❖ Port isolation
- ❖ Circuit Protection



CSC & CSI Series

DESCRIPTION:

Cernexwave's CSC and CSI series SMT isolators and circulators are offered to cover the frequency range of UHF to 18 GHz. These isolators and circulators are designed and manufactured to provide low insertion loss and high isolation for SMT component and module integrations. The 50Ω input and output SMT line configuration is immediately ready for circuit insertion. While the isolator is an important device where port isolation or VSWR is concerned, the circulator offers duplexing functions in many radar and communication systems. Two types of SMT isolators and circulators are offered for customers to choose from.

SPECIFICATIONS:

ISOLATORS:

Model No	Frequency Range (GHz)	Insertion Loss (dB Max)	Isolation (dB Min)	VSWR (Max)	Operating Temp (°C)	Power (W)
CSIU8U80714	.824-.849	0.7	14		-40°C - +85°C	
CSIU9U90320-01	.91-.92	0.35	20	1.25:1	-40°C - +85°C	2000
CSI02020518	2.4-2.5	0.5	18	1.30:1	-40°C - +85°C	5
CSI02020515	2.2-2.4	0.5	15	1.30:1	-40°C - +85°C	
CSI02020420	2.7-2.9	0.4	20	1.25:1	-40°C - +85°C	10
CSI08100616	8-10.25	0.6	16	1.35:1	-40°C - +85°C	50
CSI09100420	9.85-10.3	0.4	20	1.35:1	-40°C - +85°C	
CSI11110320	11-11.5	0.35	20	1.35:1	-40°C - +85°C	



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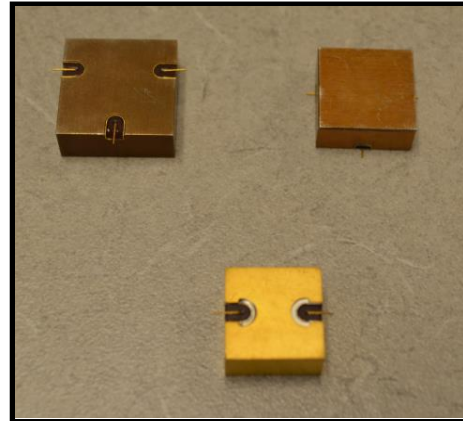
CIRCULATORS:

Model No	Frequency Range (GHz)	Insertion Loss (dB Max)	Isolation (dB Min)	VSWR (Max)	Operating Temp (°C)	Power (W)
CSC01020518-01	1.0-2.0	0.5	18	1.3:1	-40°C - +85°C	60
CSC01020416-01	1.98-2.51	0.4	16	1.35:1	-40°C - +85°C	
CSC02020221K	2.3-2.4	0.25	21	1.2:1	-40°C - +85°C	30
CSC02020225-01	2.3-2.4	0.25	25		-40°C - +85°C	
CSC02020225-02	2.3-2.4	0.25	25		-40°C - +85°C	
CSC02020225-03	2.3-2.4	0.25	25		-40°C - +85°C	
CSC02020225-04	2.3-2.4	0.25	25		-40°C - +85°C	
CSC03030321-01	3.1-3.5	0.35	21			100
CSC03030322	3.3-3.5	0.3	22		-40°C - +85°C	30
CSC03030322-01	3.25-3.45	0.3	22		-40°C - +85°C	30
CSC03030322-02	3.5-3.65	0.3	22		-40°C - +85°C	30
CSC03030418-01	3.05-3.5	0.4	18		-40°C - +85°C	30
CSC03030418-XX	3.05-3.5	0.4	18	1.3:1	-40°C - +85°C	30
CSC03040520-YY	3.9-4.3	0.5	20		-40°C - +85°C	10
CSC05060618	5.0-6.0	0.6	18		-40°C - +85°C	50
CSC08100616	8-10.25	0.6	16		-40°C - +85°C	50
CSC08100616-01	8-10.25	0.6	16		-40°C - +85°C	50
CSC08100618-01	8-10.25	0.6	18		-40°C - +85°C	50
CSC08100618CS	8.7-10.5				-40°C - +85°C	
CSC08100716-XX	8.7-10.5	0.7	16		-40°C - +85°C	
CSC08100718	8.7-10.5	0.7	18	1.3:1	-40°C - +85°C	10
CSC08100817	8.7-10.5	0.8	17	1.35:1	-40°C - +85°C	10
CSCS12130518	12-13.5	0.5	18		-40°C - +85°C	10
CSCS12130718G	12-13.5	0.7	18	1.3:1	-40°C - +85°C	10
CSCS12140718	12-14	0.7	18		-40°C - +85°C	10
CSCS15190715	15-19	0.7	15	1.35:1	-40°C - +85°C	4
CSCS15190715-01	15-19	0.7	15	1.35:1	-40°C - +85°C	4
CSCS15190715-02	15-19	0.7	15	1.35:1	-40°C - +85°C	4

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FEATURES:

- ❖ Frequency coverage: UHF to 45 GHz
- ❖ Low insertion loss and high isolation
- ❖ Single magnet and compact design



CSC & CSI Series

CIRCULATORS:

Model No	Frequency Range (GHz)	Insertion Loss (dB Max)	Isolation (dB Min)	VSWR (Max)	Operating Temp (°C)	Power (W) F/R	Size (in)
CSC03040720SQ	3.9-4.3	0.7	20	1.25	-40°C- +70°C	30/3	.590x.590x.275
CSC04040720SQ-01	4.0-4.5	0.7	20	1.25	-40°C- +70°C	30/3	.590x.590x.275
CSC04040720SQ-02	4.4-4.7	0.7	20	1.25	-55°C- +85°C	30/3	.590x.590x.275
CSC04050720SQ-01	4.6-5.0	0.7	20	1.25	-55°C- +85°C	30/3	.590x.590x.275
CSC04050720SQ-02	4.8-5.2	0.7	20	1.30	-55°C- +85°C	20/3	.590x.590x.275
CSC05050720SQ-01	5.0-5.6	0.7	20	1.30	-55°C- +85°C	20/3	.590x.590x.275
CSC05050720SQ-02	5.2-5.8	0.7	20	1.30	-55°C- +85°C	15/3	.590x.590x.275
CSC05050718SQ	5.2-5.9	0.7	18	1.35	-55°C- +85°C		.590x.590x.275
CSC05060817SQ	5.0-6.0	0.8	17	1.40	-55°C- +85°C		.500x.500x.225
CSC05060720SQ	5.7-6.0	0.7	20	1.30	-55°C- +85°C	15/3	.590x.590x.275
CSC06060720SQ	6.0-6.5	0.7	20	1.30	-55°C- +85°C	15/3	.590x.590x.275
CSC06070720SQ	6.4-7.0	0.7	20	1.30	-55°C- +85°C	15/3	.590x.590x.275
CSC06070718SQ	6.5-7.1	0.7	18	1.35	-55°C- +85°C		.500x.500x.225
CSC06070818SQ	6.5-7.5	0.8	18	1.35	-55°C- +85°C	15/3	.590x.590x.275
CSC07070720SQ	7.0-7.5	0.7	20	1.30	-55°C- +85°C	15/3	.500x.500x.225
CSC07080720SQ	7.5-8.0	0.7	20	1.30	-55°C- +85°C	15/3	.500x.500x.225
CSC08080720SQ	8.0-8.5	0.7	20	1.30	-55°C- +85°C	15/3	.500x.500x.225
CSC07090818SQ	7.5-9.5	0.8	18	1.35	-55°C- +85°C	15/3	.500x.500x.225
CSC09100720SQ	9.0-10.0	0.7	20	1.30	-55°C- +85°C	15/3	.500x.500x.225
CSC08120818SQ	8.0-12.0	0.8	18	1.40	-55°C- +85°C	15/3	.500x.500x.225



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Model No	Frequency Range (GHz)	Insertion Loss (dB Max)	Isolation (dB Min)	VSWR (Max)	Operating Temp (°C)	Power (W) F/R	Size (in)
CSC09100718SQ	9.0-10.0	0.7	18	1.30	-55°C- +85°C	15/3	.500x.500x.225
CSC08100817SQ	8.6-10.6	0.8	17	1.40	-55°C- +85°C		.500x.500x.225
CSC10110718SQ-01	10.0-11.0	0.7	18	1.30	-55°C- +85°C	15/3	.500x.500x.225
CSC10110718SQ-02	10.5-11.5	0.7	18	1.30	-55°C- +85°C	15/3	.500x.500x.225
CSC08120815SQ	8.0-12.0	0.8	15	1.40	-55°C- +85°C	15/3	.500x.500x.225
CSC08120816SQ	8.0-12.0	0.8	16	1.45	-55°C- +85°C		.500x.500x.225
CSC08120817SQ	8.0-12.0	0.8	17	1.40	-55°C- +85°C		.500x.500x.225
CSC11120718SQ-01	11.0-12.0	0.7	18	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC11120718SQ-02	11.5-12.5	0.7	18	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC12130718SQ	12.0-13.0	0.7	18	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC13140718SQ-01	13.0-14.0	0.7	18	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC13140718SQ-02	13.5-14.5	0.7	18	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC14150718SQ-01	14.0-15.0	0.7	18	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC14150718SQ-02	14.5-15.5	0.7	18	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC15160718SQ	15.5-16.5	0.7	18	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC16170718SQ	16.5-17.5	0.7	18	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC15170718SQ	15.5-17.5	0.7	18	1.35	-55°C- +85°C	12/3	.500x.500x.225
CSC15180816SQ	15.0-18.0	0.8	16	1.30	-55°C- +85°C	12/3	.500x.500x.225
CSC14150717SQ-01	14.0-15.0	0.7	17	1.30	-55°C- +85°C	12/3	.315x.315x.225
CSC14150717SQ-02	14.5-15.5	0.7	17	1.30	-55°C- +85°C	12/3	.315x.315x.225
CSC14150720SQ	14.5-15.5	0.7	20	1.30	-55°C- +85°C		.315x.315x.225
CSC15160717SQ	15.5-16.5	0.7	17	1.30	-55°C- +85°C	12/3	.315x.315x.225
CSC1217115SQ	12.0-17.0	1	15	1.50	-55°C- +85°C		.315x.315x.225
CSC16170717SQ	16.5-17.5	0.7	17	1.30	-55°C- +85°C	12/3	.315x.315x.225
CSC15170717SQ	15.5-17.5	0.7	17	1.35	-55°C- +85°C	12/3	.315x.315x.225
CSC14180916SQ	14.0-18.0	0.9	16	1.45	-55°C- +85°C		.315x.315x.225
CSC15180816SQ	15.0-18.0	0.8	16	1.40	-55°C- +85°C	12/3	.315x.315x.225
CSC1923115SQ	19.5-23.0	1	15	1.45	-55°C- +85°C		.500x.500x.225
CSC22240918SQ	22.0-24.0	0.9	18	1.35	-55°C- +85°C	12/3	.315x.315x.225
CSC24261216SQ	24.5-26.5	1.2	16	1.45	-55°C- +85°C		.315x.315x.225
CSC34361416SQ	34-36	1.4	16	1.45	-55°C- +85°C		.315x.315x.225

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ISOLATORS:

Model No	Frequency Range (GHz)	Insertion Loss (dB Max)	Isolation (dB Min)	VSWR (Max)	Operating Temp (°C)	Power (W) F/R	Size (in)
CSI05050720SQ	5.2-5.8	0.7	20	1.30	-55°C- +85°C	20/3	.590x.590x.275
CSI05060620SQ	5.7-6.0	0.6	20	1.30	-55°C- +85°C	20/3	.590x.590x.275
CSI06060620SQ	6.0-6.5	0.6	20	1.30	-55°C- +85°C	20/3	.590x.590x.275
CSI06070620SQ	6.4-7.0	0.6	20	1.30	-55°C- +85°C	20/3	.590x.590x.275
CSI05070718SQ	5.8-7.2	0.7	18	1.30	-55°C- +85°C	10	.590x.590x.275
CSI06070720SQ	6.5-7.5	0.7	20	1.35	-55°C- +85°C	20/3	.590x.590x.275
CSI07070720SQ	7.0-7.5	0.7	20	1.30	-55°C- +85°C	15/3	.450x.450x.275
CSI07080720SQ	7.5-8.0	0.7	20	1.30	-55°C- +85°C	15/3	.450x.450x.275
CSI07080818SQ	7.0-8.5	0.8	18	1.35	-55°C- +85°C	10	.450x.450x.275
CSI08080720SQ	8.0-8.5	0.7	20	1.30	-55°C- +85°C	15/3	.450x.450x.275
CSI07090818SQ	7.5-9.5	0.8	18	1.35	-55°C- +85°C	15/3	.450x.450x.275
CSI08120817SQ	8.0-12	0.8	17	1.40	-55°C- +85°C	15/3	.450x.450x.275
CSI08090720SQ-01	8.5-9.0	0.7	20	1.30	-55°C- +85°C	15/3	.450x.450x.275
CSI08090720SQ-02	8.8-9.8	0.7	20	1.30	-55°C- +85°C	0.5	.450x.450x.275
CSI08100718SQ	8.5-10.5	0.7	18	1.35	-55°C- +85°C	20	.590x.590x.275
CSI09100720SQ-01	9.0-10.0	0.7	20	1.30	-55°C- +85°C	15/3	.450x.450x.275
CSI09100720SQ	9.5-10.5	0.7	20	1.30	-55°C- +85°C	15/3	.450x.450x.275
CSI09110718SQ	9.0-11.0	0.7	18	1.35	-55°C- +85°C	15/3	.450x.450x.275
CSI10110720SQ	10.5-11.5	0.7	20	1.30	-55°C- +85°C	15/3	.450x.450x.275
CSI11120720SQ	11.0-12.0	0.7	20	1.30	-55°C- +85°C	12/3	.450x.450x.275
CSI10120720SQ	10.0-12.0	0.7	20	1.35	-55°C- +85°C	12/3	.450x.450x.275
CSI11120720SQ-01	11.9-12.2	0.7	20	1.30	-55°C- +85°C	0.5	.450x.450x.275
CSI11120720SQ-02	11.5-12.5	0.7	20	1.30	-55°C- +85°C	12/3	.450x.450x.275
CSI12130720SQ	12.0-13.0	0.7	20	1.30	-55°C- +85°C	12/3	.450x.450x.275
CSI13140720SQ-01	13.0-14.0	0.7	20	1.30	-55°C- +85°C	12/3	.450x.450x.275
CSI12140720SQ	12.0-14.0	0.7	20	1.35	-55°C- +85°C	12/3	.450x.450x.275
CSI13140720SQ-02	13.5-14.5	0.7	20	1.30	-55°C- +85°C	12/3	.450x.450x.275
CSI13150818SQ	13.0-15.0	0.8	18	1.35	-55°C- +85°C	0.5	.450x.450x.275
CSI14150720SQ-01	14.0-15.0	0.7	20	1.30	-55°C- +85°C	12/3	.450x.450x.275
CSI14150720SQ-02	14.5-15.5	0.7	20	1.30	-55°C- +85°C	12/3	.450x.450x.275
CSI14160720SQ	14.0-16.0	0.7	20	1.35	-55°C- +85°C	12/3	.450x.450x.275
CSI14160817SQ	14.2-16.0	0.8	17	1.40	-55°C- +85°C	10	.450x.450x.275



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CSI15160720SQ	15.5-16.5	0.7	20	1.30	-55°C- +85°C	12/3	.450x.450x.275
CSI1217115SQ	12.0-17.0	1	15	1.50	-55°C- +85°C	10	.450x.450x.275
CSI16170818SQ	16.0-17.0	0.8	18	1.35	-55°C- +85°C	10	.450x.450x.275
CSI16170720SQ	16.5-17.5	0.7	20	1.30	-55°C- +85°C	12/3	.450x.450x.275
CSI15170718SQ	15.5-17.5	0.7	18	1.35	-55°C- +85°C	12/3	.450x.450x.275
CSI15170720SQ	15.5-17.5	0.7	20	1.35	-55°C- +85°C	12/3	.450x.450x.275
CSI08181411SQ	8.0-18.0	1.4	11	1.65	-55°C- +85°C	5	.450x.450x.275
CSI15180818SQ	15.0-18.0	0.8	18	1.40	-55°C- +85°C	12/3	.450x.450x.275
CSI19210818SQ	19.6-21.0	0.8	18	1.40	-55°C- +85°C	12/3	.450x.450x.275
CSI1821117SQ	18.2-21.2	1	17	1.45	-55°C- +85°C	0.5	.450x.450x.275
CSI21220818SQ	21.0-22.0	0.8	18	1.40	-55°C- +85°C	12/3	.450x.450x.275
CSI24281418SQ	24.5-28.35	1.4	18	1.45	-55°C- +85°C	0.5	.450x.450x.275
CSI29311418SQ	29.0-31.0	1.4	18	1.45	-55°C- +85°C	0.5	.450x.450x.275
CSI2931118SQ	29.5-31.5	1	18	1.40	-55°C- +85°C	12/3	.450x.450x.275
CSI30331415SQ	30.4-33.4	1.4	15	1.45	-55°C- +85°C	0.5	.450x.450x.275
CSI32361515SQ	32.0-36.0	1.5	15	1.55	-55°C- +85°C	0.5	.450x.450x.275
CSI3436117SQ	34.0-36.0	1	17	1.45	-55°C- +85°C	12/3	.450x.450x.275
CSI43451715SQ	43.5-45.5	1.7	15	1.55	-55°C- +85°C	0.5	.450x.450x.275

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