Isolators and Circulators between 88 MHz and 40 GHz

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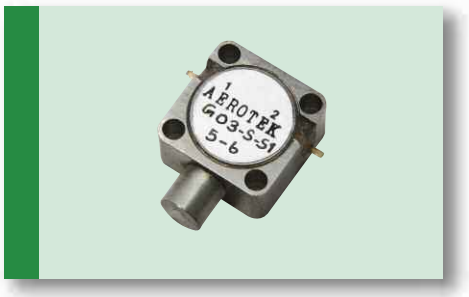
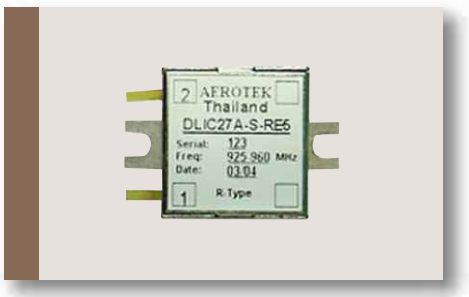
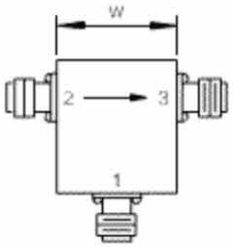
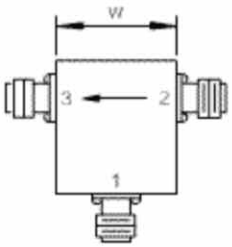




Coaxial Model Number Description



CLOCKWISE



ANTI CLOCKWISE

MODEL : X XX -X A XXX/ X Option for non standard

Band (GHz)	Frequency range	Connector types	INSERT "A" FOR ANTI-CLOCKWISE	Gender of connectors
C 0.5 - 1.0 **D** 1.0 - 2.0 **E** 2.0 - 3.0 **F** 3.0 - 4.0 **G** 4.0 - 6.0 **H** 6.0 - 8.0 **I** 8.0 - 10.0 **J** 10.0 - 13.0 **K** 13.0 - 18.0 **L** 18.0 - 26.5 **M** 26.5 - 40.0	SPECIFY BANDWIDTH ALSO SIZE, CONFIGURATION AND OTHER SPECIFICATIONS	1. SMA* see note 2. N BASE 12.7 mm. 3. TNC 4. COMBINATION TYPE 1/2/3 5. OTHER 6. TAB 7. COMBINATION TYPE 1/2/3/6 8. PIN 9. COMBINATION TYPE 1/2/3/8 10. N BASE 17.5 mm. 11. COMBINATION TYPE 10/1		SPECIFY THE GENDER OF CONNECTORS POSITION AND POWER RATING OF LOAD (IF REQUIRED) IN SEQUENCE OF PORT 1/2/3/ (4 if 4 ports) M for Male F for Female P for Pin(0.5mm. diameter) L1 for 1 watt Load L10 for 10 watts Load L15 for 15 watts Load

Note:
- Stainless steel connectors are used in band C, D, E, F and G unless special requirement is requested.
- Brass gold plated connectors are used in band H, I, J and K unless special requirement is requested.

Coaxial

- Frequency from 790 MHz to 40 GHz
- Narrow bandwidth up to octave plus bandwidth
- Connectors for standard models are SMA fernale and termination load for an isolator is 1 W
- High power up to 500 Watts or low loss < 0.15 dB is available
- Phase matching, EMI or RF shielding is available upon request
- Customized design is available with specific frequency, configuration, electrical specification, connector type or termination load up to 150 Watts

Standard Narrow Bandwidth Coaxials

Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Dimension (w x l x t) (mm)	Weight (grams)
Circulator	Isolator						Peak	CW		
C10-1FFF	C10-1L1FF	0.79 – 0.88	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
C11-1FFF	C11-1L1FF	0.840 – 0.935	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
C12-1FFF	C12-1L1FF	0.88 – 0.95	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
C13-1FFF	C13-1L1FF	0.90 – 0.93	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
C14-1FFF	C14-1L1FF	0.90 – 1.50	16	0.9	1.45	0 to +55	100	50	70 x 70 x 22	320
C15-1FFF	C15-1L1FF	0.91 – 0.92	23	0.5	1.15	-54 to +85	500	50	32 x 34 x 19	90
C16-1FFF	C16-1L1FF	0.91 – 1.05	18	0.6	1.35	-54 to +85	500	50	32 x 34 x 19	90
C19-1FFF	C19-1L1FF	0.930 – 0.965	23	0.5	1.15	-54 to +85	500	50	32 x 34 x 19	90
C20-1FFF	C20-1L1FF	0.95 – 1.00	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
C31A-1FFF	C31A-1L1FF	0.825 – 0.905	20	0.5	1.25	-54 to +85	500	50	37 x 40.5 x 24	150
D10-1FFF	D10-1L1FF	0.95 – 1.05	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D12-1FFF	D12-1L1FF	1.0 – 1.1	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D13-1FFF	D13-1L1FF	1.03 – 1.09	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D14-1FFF	D14-1L1FF	1.2 – 1.4	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D15-1FFF	D15-1L1FF	1.2 – 1.6	23	0.5	1.15	0 to +55	100	50	60 x 60 x 22	260
D16-1FFF	D16-1L1FF	1.3 – 1.5	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D17-1FFF	D17-1L1FF	1.35 – 1.85	20	0.5	1.25	0 to +55	100	50	60 x 60 x 22	260
D18-1FFF	D18-1L1FF	1.4 – 1.54	20	0.4	1.25	-54 to +85	500	50	32 x 34 x 19	90
D19-1FFF	D19-1L1FF	1.4 – 1.6	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D20-1FFF	D20-1L1FF	1.4 – 1.8	18	0.6	1.30	-54 to +85	500	50	32 x 34 x 19	90
D21-1FFF	D21-1L1FF	1.4 – 2.5	17	0.5	1.35	0 to +55	100	50	60 x 60 x 22	260
D22-1FFF	D22-1L1FF	1.5 – 1.7	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D23-1FFF	D23-1L1FF	1.54 – 1.74	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D24-1FFF	D24-1L1FF	1.6 – 1.8	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D25-1FFF	D25-1L1FF	1.625 – 1.650	23	0.4	1.15	-54 to +85	500	50	32 x 34 x 19	90
D26-1FFF	D26-1L1FF	1.63 – 2.30	20	0.4	1.25	0 to +55	100	50	50 x 50 x 21	190
D27-1FFF	D27-1L1FF	1.65 – 1.85	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D28-1FFF	D28-1L1FF	1.7 – 1.9	20	0.4	1.25	-54 to +85	500	50	32 x 34 x 19	90
D30-1FFF	D30-1L1FF	1.7 – 2.0	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
D31-1FFF	D31-1L1FF	1.7 – 2.1	23	0.35	1.15	0 to +55	100	50	50 x 50 x 21	190
D32-1FFF	D32-1L1FF	1.7 – 2.1	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
E10-1FFF	E10-1L1FF	1.7 – 2.3	23	0.35	1.20	0 to +55	100	50	50 x 50 x 21	190
E11-1FFF	E11-1L1FF	1.7 – 2.4	23	0.4	1.20	0 to +55	100	50	50 x 50 x 21	190
D33-1FFF	D33-1L1FF	1.8 – 2.0	20	0.4	1.25	-54 to +85	500	50	32 x 34 x 19	90
D34-1FFF	D34-1L1FF	1.8 – 2.1	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
E12-1FFF	E12-1L1FF	1.9 – 2.1	20	0.4	1.25	-54 to +85	500	50	32 x 34 x 19	90
E13-1FFF	E13-1L1FF	1.9 – 2.3	20	0.5	1.25	-54 to +85	500	50	32 x 34 x 19	90
E14-1FFF	E14-1L1FF	2.0 – 2.3	20	0.4	1.25	-54 to +85	500	50	32 x 34 x 19	90
E15-1FFF	E15-1L1FF	2.0 – 2.5	20	0.4	1.25	-30 to +70	250	50	41 x 42 x 20	120
E16-1FFF	E16-1L1FF	2.0-3.0	20	0.5	1.25	-30 to +70	250	50	41 x 42 x 20	120

Standard Narrow Bandwidth Coaxials

Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Dimension (w x l x t) (mm)	Weight (grams)
Circulator	Isolator						Peak	CW		
E17-1FFF	E17-1L1FF	2.1 – 2.4	20	0.4	1.25	-54 to +85	500	50	32 x 34 x 19	90
E18-1FFF	E18-1L1FF	2.1 – 2.3	23	0.3	1.15	-10 to +55	250	50	41 x 42 x 20	120
E19-1FFF	E19-1L1FF	2.1 – 2.3	20	0.4	1.25	-54 to +85	500	50	32 x 34 x 19	90
E20-1FFF	E20-1L1FF	2.2 – 2.3	23	0.4	1.15	-54 to +85	250	25	32 x 34 x 19	90
E21-1FFF	E21-1L1FF	2.2 – 2.3	20	0.5	1.25	0 to +55	250	25	25 x 25 x 13	45
E22-1FFF	E22-1L1FF	2.3 – 2.5	23	0.4	1.15	-54 to +85	250	25	32 x 34 x 19	90
E23-1FFF	E23-1L1FF	2.3 – 2.5	20	0.4	1.25	0 to +55	250	25	25 x 25 x 13	45
E24-1FFF	E24-1L1FF	2.5 – 2.9	20	0.4	1.25	-54 to +85	250	25	32 x 34 x 19	90
E25-1FFF	E25-1L1FF	2.5 – 2.9	20	0.4	1.25	-54 to +85	250	25	25 x 25 x 13	45
E26-1FFF	E26-1L1FF	2.5 – 3.3	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	80
E27-1FFF	E27-1L1FF	2.5 – 3.3	20	0.4	1.25	0 to +55	250	25	25 x 25 x 13	45
F10-1FFF	F10-1L1FF	2.5 – 3.6	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	80
F11-1FFF	F11-1L1FF	2.6 – 3.4	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	80
E28-1FFF	E28-1L1FF	2.7 – 3.1	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	80
E29-1FFF	E29-1L1FF	2.7 – 3.1	20	0.4	1.25	0 to +55	250	25	25 x 25 x 13	45
F12-1FFF	F12-1L1FF	2.8 – 3.5	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	80
F13-1FFF	F13-1L1FF	3.0 – 4.0	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	80
F14-1FFF	F14-1L1FF	3.2 – 4.0	20	0.4	1.25	0 to +55	250	25	32 x 34 x 19	80
F15-1FFF	F15-1L1FF	3.4 – 4.2	23	0.4	1.15	0 to +55	250	25	25 x 29 x 18	50
F16-1FFF	F16-1L1FF	3.45 – 4.45	22	0.4	1.15	0 to +55	250	25	25 x 29 x 18	50
F17-1FFF	F17-1L1FF	3.5 – 4.2	23	0.4	1.15	0 to +55	250	25	25 x 29 x 18	50
G10-1FFF	G10-1L1FF	3.6 – 6.5	20	0.4	1.25	0 to +55	250	25	25 x 29 x 18	50
F18-1FFF	F18-1L1FF	3.625 – 4.200	25	0.3	1.15	-30 to +70	250	25	25 x 29 x 18	50
F19-1FFF	F19-1L1FF	3.7 – 4.2	25	0.3	1.15	-30 to +70	250	25	25 x 29 x 18	50
G11-1FFF	G11-1L1FF	4.0 – 4.6	20	0.4	1.25	-30 to +70	250	25	25 x 29 x 18	50
G12-1FFF	G12-1L1FF	4.0 – 5.0	20	0.4	1.25	-30 to +70	250	25	25 x 29 x 18	50
G13-1FFF	G13-1L1FF	4.0 – 6.0	20	0.4	1.25	-30 to +70	250	25	25 x 29 x 18	50
G14-1FFF	G14-1L1FF	4.2 – 4.5	25	0.4	1.15	-30 to +70	250	25	25 x 29 x 18	50
G15-1FFF	G15-1L1FF	4.3 – 5.5	25	0.4	1.15	-30 to +70	250	25	25 x 29 x 18	50
G16-1FFF	G16-1L1FF	4.4 – 5.0	20	0.4	1.25	-30 to +70	250	25	21 x 21 x 13	35
G17-1FFF	G17-1L1FF	4.4 – 5.5	25	0.4	1.15	-30 to +70	250	25	25 x 29 x 18	50
G18-1FFF	G18-1L1FF	4.4 – 6.5	20	0.4	1.25	-30 to +70	250	25	25 x 29 x 18	50
G19-1FFF	G19-1L1FF	5.0 – 6.0	23	0.4	1.15	-54 to +85	250	25	25 x 29 x 18	50
H10-1FFF	H10-1L1FF	5.0 – 7.0	20	0.4	1.25	-54 to +85	250	25	25 x 29 x 18	50
G20-1FFF	G20-1L1FF	5.3 – 6.0	23	0.4	1.25	-54 to +85	250	25	25 x 29 x 18	50
H11-1FFF	H11-1L1FF	5.7 – 6.8	20	0.4	1.25	-54 to +85	250	25	25 x 29 x 18	50
H12-1FFF	H12-1L1FF	5.8 – 6.5	20	0.4	1.25	-30 to +70	250	25	19 x 24 x 17	45
H13-1FFF	H13-1L1FF	5.8 – 8.6	20	0.4	1.25	-30 to +70	250	25	19 x 24 x 17	45
H14-1FFF	H14-1L1FF	6.0 – 8.0	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	45
H15-1FFF	H15-1L1FF	6.0 – 9.0	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	45

Standard Narrow Bandwidth Coaxials

Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Dimension (w x l x t) (mm)	Weight (grams)
Circulator	Isolator						Peak	CW		
H16-1FFF	H16-1L1FF	6.5 – 7.2	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	45
H17-1FFF	H17-1L1FF	6.55 – 7.85	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	45
H18-1FFF	H18-1L1FF	7.0 – 8.5	20	0.4	1.25	-54 to +85	250	25	19 x 24 x 17	45
H19-1FFF	H19-1L1FF	7.0 – 8.5	20	0.4	1.25	-30 to +70	250	25	16 x 21 x 17	26
H21-1FFF	H21-1L1FF	7.0 – 9.0	20	0.4	1.25	-30 to +70	250	25	16 x 21 x 17	26
I11-1FFF	I11-1L1FF	7.0 – 11.0	20	0.5	1.25	-30 to +70	250	25	16 x 21 x 17	26
I12-1FFF	I12-1L1FF	7.0 – 12.0	17	0.6	1.35	-30 to +70	250	25	16 x 21 x 17	26
H23-1FFF	H23-1L1FF	7.1 – 7.8	20	0.4	1.25	-54 to +85	250	25	16 x 21 x 17	26
H25-1FFF	H25-1L1FF	7.1 – 8.5	20	0.4	1.25	-54 to +85	250	25	16 x 21 x 17	26
H27-1FFF	H27-1L1FF	7.25 – 7.75	23	0.4	1.15	-54 to +85	250	25	16 x 21 x 17	26
I14-1FFF	I14-1L1FF	7.5 – 9.0	20	0.4	1.25	-54 to +85	250	25	16 x 21 x 17	26
I16-1FFF	I16-1L1FF	7.9 – 8.4	23	0.4	1.15	-54 to +85	250	25	16 x 21 x 17	26
I17-1FFF	I17-1L1FF	8.0 – 11.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
J10-1FFF	J10-1L1FF	8.0 – 12.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
J11-1FFF	J11-1L1FF	8.0 – 12.4	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
I18-1FFF	I18-1L1FF	8.4 – 9.7	23	0.4	1.15	-54 to +85	250	25	16 x 21 x 17	26
I19-1FFF	I19-1L1FF	8.4 – 10.0	23	0.4	1.15	-54 to +85	250	25	16 x 21 x 17	26
I20-1FFF	I20-1L1FF	9.0 – 10.0	23	0.4	1.15	-54 to +85	250	25	16 x 21 x 17	26
J19-1FFF	J19-1L1FF	9.0 – 12.0	20	0.5	1.25	-54 to +85	250	25	16 x 21 x 17	26
K10-1FFF	K10-1L1FF	9.0 – 17.0	18	0.7	1.30	-54 to +85	250	25	16 x 21 x 17	26
J20-1FFF	J20-1L1FF	9.5 – 10.5	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
J21-1FFF	J21-1L1FF	9.5 – 12.4	23	0.5	1.20	-54 to +85	250	25	16 x 21 x 17	26
J22-1FFF	J22-1L1FF	9.6 – 10.2	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
J23-1FFF	J23-1L1FF	9.7 – 12.0	20	0.4	1.15	-54 to +85	250	25	16 x 21 x 17	26
J24-1FFF	J24-1L1FF	10.0 – 12.0	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K11-1FFF	K11-1L1FF	10.0 – 18.0	18	0.6	1.35	-54 to +85	250	25	13 x 16 x 13	20
J25-1FFF	J25-1L1FF	10.2 – 12.4	23	0.4	1.15	-54 to +85	250	25	13 x16 x 13	20
J26-1FFF	J26-1L1FF	10.5 – 11.5	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
J27-1FFF	J27-1L1FF	10.7 – 11.7	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
J28-1FFF	J28-1L1FF	11.0 – 14.0	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K12-1FFF	K12-1L1FF	11.0 – 18.0	18	0.6	1.35	-54 to +85	250	25	13 x 16 x 13	20
J29-1FFF	J29-1L1FF	11.7 – 12.7	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K13-1FFF	K13-1L1FF	12.0 – 14.0	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
J30-1FFF	J30-1L1FF	12.2 – 13.2	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K14-1FFF	K14-1L1FF	12.4 – 15.0	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K16-1FFF	K16-1L1FF	12.4 – 18.0	20	0.5	1.25	-54 to +85	250	25	13 x 16 x 13	20
K17-1FFF	K17-1L1FF	12.5 – 13.5	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
J31-1FFF	J31-1L1FF	12.6 – 13.2	25	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K18-1FFF	K18-1L1FF	12.7 – 13.3	25	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K19-1FFF	K19-1L1FF	13.0 – 16.0	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20

Standard Narrow Bandwidth Coaxials

Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Dimension (w x l x t) (mm)	Weight (grams)
Circulator	Isolator						Peak	CW		
K20-1FFF	K20-1L1FF	14.0 – 16.0	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K21-1FFF	K21-1L1FF	14.0 – 14.5	25	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K22-1FFF	K22-1L1FF	14.0 – 16.5	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K23-1FFF	K23-1L1FF	14.1 – 15.3	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K24-1FFF	K24-1L1FF	14.25 – 16.25	23	0.4	1.25	-54 to +85	250	25	13 x 16 x 13	20
K25-1FFF	K25-1L1FF	14.4 – 15.5	25	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K26-1FFF	K26-1L1FF	15.0 – 18.0	20	0.49	1.25	-54 to +85	250	25	13 x 16 x 13	20
K27-1FFF	K27-1L1FF	15.5 – 16.6	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K28-1FFF	K28-1L1FF	16.0 – 18.0	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K29-1FFF	K29-1L1FF	17.3 – 18.1	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20
K36-1FFF	K36-1L1FF	10.0 – 15.0	23	0.4	1.15	0 to +50	250	25	13 x 16 x 13	20

Cellular Band Coaxials

Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Dimension (w x l x t) (mm)	Weight (grams)
Circulator	Isolator						Peak	CW		
C25E-1FFF	C25E-1L1FF	880 – 960	20	0.3	1.25	-30 to +70	500	100	37 x 40.5 x 24	150
C39A-1FFF	C39A-1L1FF	925 – 960	20	0.3	1.25	-30 to +70	500	100	37 x 40.5 x 24	150
D24B-1FFF	D24B-1L1FF	1710 – 1880	20	0.3	1.25	-54 to +85	500	100	32 x 34 x 19	90
D52-1FFF	D52-1L1FF	1805 – 1885	20	0.3	1.25	-54 to +85	500	100	32 x 34 x 19	90
D26A-1FFF	D26A-1L1FF	1805 – 1910	20	0.3	1.25	-54 to +85	500	100	32 x 34 x 19	90
D29B-1FFF	D29B-1L1FF	1930 – 1990	20	0.3	1.25	-54 to +85	500	100	32 x 34 x 19	90

** Finished Nicked plated*

Popular Band Coaxials

Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Dimension (w x l x t) (mm)	Weight (grams)
Circulator	Isolator						Peak	CW		
C31A-1FFF	C31A-1L1FF	0.825 – 0.905	20	0.5	1.22	-54 to +85	300	50	37 x 40.5 x 24	150
C12-1FFF	C12-1L1FF	0.880 – 0.950	20	0.5	1.25	-54 to +85	300	50	32 x 34 x 19	90
D44-1FFF	D44-1L1FF	1.427 – 1.535	20	0.4	1.20	-54 to +85	300	50	32 x 34 x 19	90
D18-1FFF	D18-1L1FF	1.40 – 1.54	20	0.4	1.25	-54 to +85	300	50	32 x 34 x 19	90
D51-1FFF	D51-1L1FF	1.805 – 1.880	25	0.25	1.15	-54 to +85	300	50	38 x 41 x 28	180
E10-1FFF	E10-1L1FF	1.70 – 2.30	23	0.35	1.20	0 to +55	100	50	50 x 50 x 21	190
E14-1FFF	E14-1L1FF	2.0 – 2.3	20	0.4	1.25	-54 to +85	500	50	32 x 34 x 19	90
E23-1FFF	E23-1L1FF	2.3 – 2.5	20	0.4	1.25	0 to +55	250	25	25 x 25 x 13	45
F61-1FFF	F61-1L1FF	2.0 – 4.0	17	0.5	1.35	-30 to +70	250	50	41 x 42 x 20	120
F19-1FFF	F19-1L1FF	3.7 – 4.2	25	0.3	1.15	-30 to +70	250	25	25 x 29 x 18	50
G16-1FFF	G16-1L1FF	4.4 – 5.0	20	0.4	1.25	-30 to +70	250	25	21 x 21 x 13	35
H12-1FFF	H12-1L1FF	5.8 – 6.5	20	0.4	1.25	-30 to +70	250	25	19 x 24 x 17	45
K36-1FFF	K36-1L1FF	10.0 – 15.0	23	0.4	1.25	0 to +50	250	25	13 x 16 x 13	20
K14-1FFF	K14-1L1FF	12.4 – 15.0	23	0.4	1.15	-54 to +85	250	25	13 x 16 x 13	20

Standard Octave Band Coaxials

Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Dimension (w x l x t) (mm)	Weight (grams)
Circulator	Isolator						Peak	CW		
C64-1FFF	C64-1L1FF	0.8 – 1.6	17	0.7	1.35	10 to +40	100	50	76 x 76 x 26	570
C60-1FFF	C60-1L1FF	0.9 – 1.7	17	0.6	1.35	10 to +40	100	50	70 x 70 x 22	380
D60-1FFF	D60-1L1FF	1.0 – 2.0	17	0.6	1.35	10 to +40	100	50	60 x 60 x 22	260
D61-1FFF	D61-1L1FF	1.12 – 2.24	17	0.5	1.35	0 to +55	100	50	60 x 60 x 22	260
D62-1FFF	D62-1L1FF	1.3 – 2.6	17	0.5	1.35	10 to +55	100	50	60 x 60 x 22	260
E60-1FFF	E60-1L1FF	1.5 – 3.0	17	0.6	1.35	0 to +55	100	50	60 x 60 x 22	260
F60-1FFF	F60-1L1FF	1.9 – 3.6	17	0.5	1.35	0 to +70	250	50	50 x 50 x 21	190
F61-1FFF	F61-1L1FF	2.0 – 4.0	17	0.5	1.35	-30 to +70	250	50	41 x 42 x 20	120
F63-1FFF	F63-1L1FF	2.6 – 5.2	18	0.5	1.35	0 to +55	250	25	32 x 34 x 19	80
G60-1FFF	G60-1L1FF	2.7 – 5.4	17	0.5	1.35	0 to +55	250	25	32 x 34 x 19	80
G61-1FFF	G61-1L1FF	3.0 – 6.0	17	0.6	1.35	-30 to +70	250	25	32 x 34 x 19	80
G62-1FFF	G62-1L1FF	3.2 – 6.5	17	0.5	1.35	-30 to +70	250	25	32 x 34 x 19	80
H60-1FFF	H60-1L1FF	4.0 – 8.0	18	0.5	1.35	-30 to +70	250	25	25 x 29 x 18	50
H61-1FFF	H61-1L1FF	4.5 – 9.0	17	0.5	1.35	0 to +55	250	25	25 x 29 x 18	50
H62-1FFF	H62-1L1FF	4.8 – 9.6	17	0.6	1.35	-30 to +70	250	25	25 x 29 x 18	50
H63-1FFF	H63-1L1FF	5.0 – 10.0	17	0.6	1.35	-30 to +70	250	25	25 x 29 x 18	50
H64-1FFF	H64-1L1FF	5.2 – 10.4	17	0.6	1.35	-30 to +70	250	25	19 x 24 x 17	45
I70-1FFF	I70 -1L1FF	6.0 – 12.0	17	0.6	1.35	-30 to +70	250	25	19 x 22 x 13	45
I77-1FFF	I77-1L1FF	6.5 – 13.0	17	0.7	1.35	-54 to +85	250	25	19 x 22 x 13	45
J60-1FFF	J60-1L1FF	8.0 – 16.0	17	0.6	1.35	-54 to +85	250	25	16 x 21 x 17	26
K60-1FFF	K60-1L1FF	9.0 – 18.0	17	0.7	1.35	-54 to +85	250	25	16 x 21 x 17	26

Standard Octave Plus Band Coaxials

Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Dimension (w x l x t) (mm)	Weight (grams)
Circulator	Isolator						Peak	CW		
D70-1FFF	D70-1L1FF	0.98 – 2.05	17	0.6	1.35	10 to +40	100	20	70 x 70 x 22	380
D80-1FFF	D80-1L1FF	1.0 – 2.6	13	1.0	1.60	10 to +40	100	20	70 x 70 x 22	380
D81-1FFF	D81-1L1FF	0.9 – 2.0	13	0.9	1.60	10 to +40	100	20	76 x 76x 26	570
D90-1FFF	D90-1L1FF	0.8 – 2.2	12	0.9	1.70	10 to +40	100	20	89 x 89 x 28	650
D91-1FFF	D91-1L1FF	0.86 – 2.3	12	1.0	1.60	10 to +40	100	20	76 x 76x 26	570
D93-1FFF	D93-1L1FF	0.8 – 2.5	12	1.0	1.70	10 to +40	100	20	89 x 89 x 28	660
E80-1FFF	E80-1L1FF	1.0 – 3.0	13	1.2	1.60	10 to +40	100	20	70 x 70 x 22	380
F80-1FFF	F80-1L1FF	1.7 – 4.2	15	0.9	1.50	0 to +55	250	20	50 x 50 x 21	190
F70-1FFF	F70-1L1FF	2.0 – 4.5	16	0.7	1.40	0 to +55	250	25	41 x 42 x 20	120
G80-1FFF	G80-1L1FF	2.0 – 6.0	13	1.0	1.60	-10 to +60	250	10	41 x 42 x 20	120
G81-1FFF	G81-1L1FF	2.4 – 5.9	15	0.8	1.45	0 to +50	250	10	41 x 42 x 20	120
G98-1FFF	G98-1L1FF	3.3 – 8.35	16	0.8	1.40	0 to +55	250	10	32 x 34 x 19	80
H70-1FFF	H70-1L1FF	3.7 – 8.2	16	0.7	1.40	-30 to +70	250	10	25 x 29 x 18	50
H80-1FFF	H80-1L1FF	3.0 – 9.0	13	1.2	1.60	0 to +50	250	10	32 x 34 x 19	80
K70-1FFF	K70-1L1FF	8.0 – 18.0	16	0.8	1.45	-30 to +70	250	25	16 x 21 x 17	26

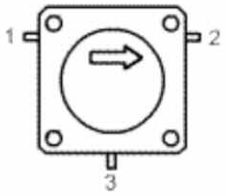
Standard High Frequency – 17 to 40 GHz

- Finished nickel-plated
- Standard termination for an isolator is 1 Watt
- Standard connector is stainless steel K2,9 mm
- Customized specification is available upon request

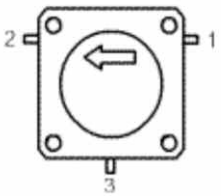
Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Dimension (w x l x t) (mm)	Weight (grams)
Circulator	Isolator						Peak	CW		
L02-1FFF	L02-1L1FF	17.0 – 20.0	20	0.5	1.25	-54 to +85	250	25	13 x 16 x 13	20
L08-1FFF	L08-1L1FF	18.0 – 22.0	20	0.5	1.25	-54 to +85	250	25	13 x 16 x 13	20
L12-1FFF	L12-1L1FF	19.0 – 23.5	20	0.5	1.25	-54 to +85	250	25	13 x 16 x 13	20
L19-1FFF	L19-1L1FF	21.0 – 25.5	20	0.5	1.25	-54 to +85	250	25	13 x 16 x 13	20
L23-1FFF	L23-1L1FF	22.0 – 26.5	20	0.5	1.25	-54 to +85	250	25	13 x 16 x 13	20
L29-5FFF	L29-5L1FF	25.0 – 27.0	20	1.0	1.35	-10 to +60	250	25	13 x 16 x 13	20
M06-5FFF	M06-5L1FF	27.0 – 31.0	20	1.1	1.35	-10 to +60	100	20	13 x 16 x 13	20
M14-5FFF	M14-5L1FF	30.0 – 35.0	18	1.1	1.35	-10 to +60	100	20	13 x 16 x 13	20
M25-5FFF	M25-5L1FF	35.0 – 40.0	16	1.3	1.40	-10 to +60	100	20	13 x 16 x 13	20

** Finished nickel plated*
** Standard termination for an isolator is 1 Watt*
** Standard connector is stainless steel SMA / 2.9 mm K*
** Average Power 25 Watts for circulator*

Drop-In Model Number Description, Flange Mount Drop-In Number Description



CLOCKWISE

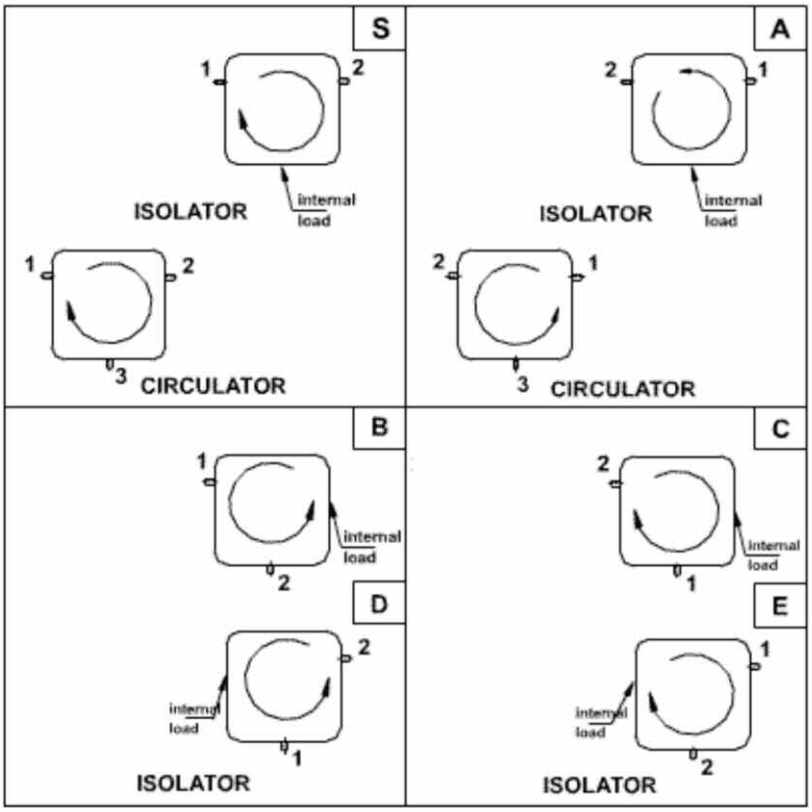


ANTI CLOCKWISE

MODEL : X XX -X- X X

F	Band (GHz)	Frequency range	Option number	Configulation	Termination
Add „F" for flange mount	C 0.5 - 1.0 D 1.0 - 2.0 E 2.0 - 3.0 F 3.0 - 4.0 G 4.0 - 6.0 H 6.0 - 8.0 I 8.0 - 10.0 J 10.0 - 13.0 K 13.0 - 18.0 L 18.0 - 26.5 M 26.5 - 40.0	SPECIFY FREQUENCY AND BANDWIDTH ALSO SIZE, AND OTHER SPECIFICATIONS	INSERT NUMBER TO SPECIFY NON-STANDARD SPECIFICATIONS S for STANDARD	(SEE BELOW) S for STANDARD CLOCKWISE A for STANDARD ANTI-CLOCKWISE B,C,D,E SEE BELOW	SPECIFY POWER RATING OF LOAD 1 for 1W 5 for 5W 10 for 10W 65 for 65W

Configuration



Drop-In

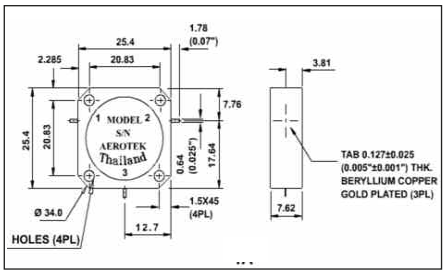
- Frequency from 300 MHz to 26,5 GHz
- No NdFeB magnets
- Small and miniature size or surface mounted tab is available
- High power up to 500 Watts or low loss < 0.15 dB is available
- Standard package is nickel-plated finished with gold-plated tab
- Customized design is available with specific frequency electrical specification or termination load up to 100 Watts

Standard Narrow Band Drop-Ins

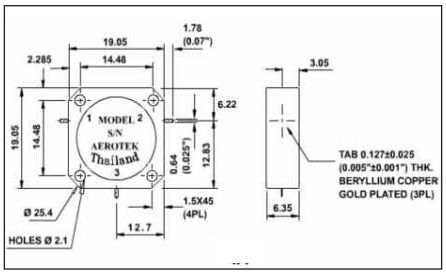
Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power rating (watts)		Outline Fig.		Weight (grams)
Circulator	Isolator						Peak	CW	Cir.	Iso.	
D01-S-S	D01-S-S1	1.2 – 1.4	20	0.5	1.25	-40 to +85	500	50	1A	1C	30
D02-S-S	D02-S-S1	1.43 – 1.53	18	0.5	1.3	-30 to +70	500	50	4A	4C	15
D03-S-S	D03-S-S1	1.4 – 1.6	20	0.5	1.25	-54 to +95	500	50	1A	1C	30
E01-S-S	E01-S-S1	2.0 – 2.3	20	0.4	1.25	-54 to +95	500	50	1A	1C	30
F01-S-S	F01-S-S1	3.7 – 4.2	20	0.5	1.25	-54 to +95	200	25	4A	4C	15
G01-S-S	G01-S-S1	4.2 – 4.4	20	0.5	1.25	-54 to +95	200	25	6A	6C	8
G02-S-S	G02-S-S1	4.4 – 5.0	20	0.5	1.25	-54 to +95	200	25	6A	6C	8
G03-S-S	G03-S-S1	5.0 – 6.0	20	0.5	1.25	-54 to +95	200	25	6A	6C	8
H01-S-S	H01-S-S1	5.5 – 6.0	20	0.5	1.25	-54 to +95	200	25	6A	6C	8
H02-S-S	H02-S-S1	6.4 – 7.8	20	0.5	1.25	-54 to +95	200	25	6A	6C	8
H03-S-S	H03-S-S1	7.0 – 8.5	20	0.4	1.25	-54 to +95	200	25	6A	6C	8
I06-S-S	I06-S-S1	9.0 – 10.0	20	0.5	1.25	-54 to +95	200	25	6A	6C	8
J01-S-S	J01-S-S1	10.7 – 11.7	20	0.6	1.25	-54 to +95	200	25	6A	6C	8

** Power rating listed on this table is for circulators only.*
** Standard terminations for isolator are rated at 1 watt cw.*
** Rugged steel housing provides excellent magnetic shielding.*
** Test fixtures for verifying preformances are available upon request.*

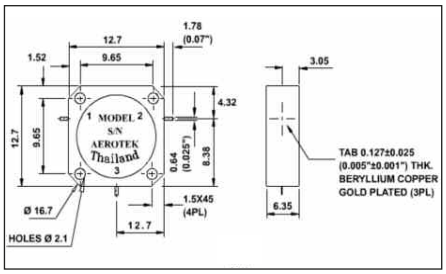
Outline Fig. 1A



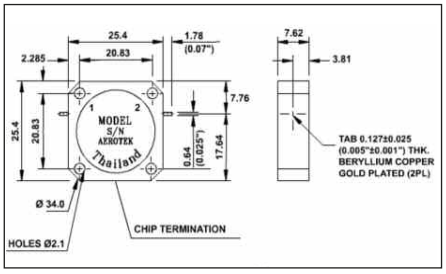
Outline Fig. 4A



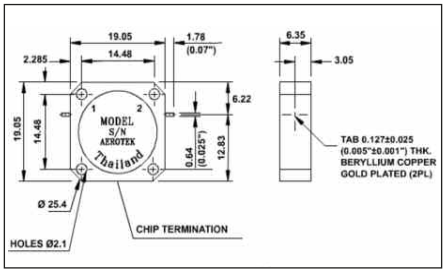
Outline Fig. 6A



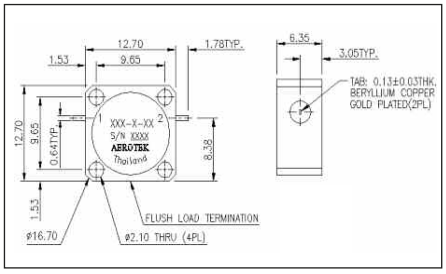
Outline Fig. 1C



Outline Fig. 4C



Outline Fig. 6C



Flange Mount Drop-In

- Frequency from 800 to 26,5 GHz
- No NdFeB magnets
- Small package size and light weight with high performance
- Customized design is available for specific frequency, electrical specification, or termination load up to 100 Watts

Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power Rating (watts)		Dimension (w x l x t) (mm)	Outline Fig. (see Pg. 16/17)	
Circulator	Isolator						FWD	REV		Cir.	Iso.
FC20-S-S	FC20-S-S65	0.824 – 0.849	20	0.5	1.25	-54 to +85	65	65	25.4 x 25.4 x 5.84	B	A
FC23-S-S	FC23-S-S65	0.860 – 0.900	20	0.5	1.25	-54 to +85	65	65	25.4 x 25.4 x 5.84	B	A
FC25-S-S	FC25-S-S65	0.860 – 0.960	20	0.5	1.25	-54 to +85	65	65	25.4 x 25.4 x 5.84	B	A
FC27-S-S	FC27-S-S65	0.925 – 0.960	20	0.5	1.25	-54 to +85	65	65	25.4 x 25.4 x 5.84	B	A
FD02-S-S	FD02-S-S5	1.0 – 1.1	20	0.5	1.25	-54 to +85	65	65	25.4 x 25.4 x 5.84	B	C
FD09-S-S	FD09-S-S5	1.2 – 1.4	20	0.5	1.25	-54 to +85	65	65	25.4 x 25.4 x 5.84	B	C
FD15-S-S	FD15-S-S5	1.4 – 1.6	20	0.5	1.25	-54 to +85	65	65	25.4 x 25.4 x 5.84	B	C
FD15A-S-S	FD15A-S-S5	1.435 – 1.540	20	0.5	1.25	-54 to +85	65	65	19.05 x 19.05 x 4.7	D	E
FD23-S-S	FD23-S-S5	1.7 – 1.8	20	0.5	1.25	-54 to +85	65	65	19.05 x 19.05 x 4.7	D	E
FD25-S-S	FD25-S-S5	1.8 – 1.9	20	0.5	1.25	-54 to +85	65	65	19.05 x 19.05 x 4.7	D	E
FE05-S-S	FE05-S-S5	2.0 – 2.3	20	0.5	1.25	-54 to +85	30	30	19.05 x 19.05 x 4.7	D	E
FE07-S-S	FE07-S-S5	2.2 – 2.4	20	0.5	1.25	-54 to +85	30	30	19.05 x 19.05 x 4.7	D	E
FE14-S-S	FE14-S-S5	2.4 – 2.5	20	0.5	1.25	-54 to +85	30	30	19.05 x 19.05 x 4.7	D	E
FE23C-S-S	FE23C-S-S5	2.6 – 2.9	20	0.5	1.25	-54 to +85	30	30	19.05 x 19.05 x 4.7	D	E
FF01B-S-S	FF01B-S-S5	2.9 – 3.1	20	0.5	1.25	-54 to +85	30	30	19.05 x 19.05 x 4.7	D	E
FF09B-S-S	FF09B-S-S5	3.1 – 3.5	20	0.5	1.25	-54 to +85	30	30	19.05 x 19.05 x 4.7	D	E
FF01-S-S	FF01-S-S5	3.7 – 4.2	20	0.5	1.25	-54 to +85	30	30	19.05 x 19.05 x 4.7	D	E
FG01-S-S	FG01-S-S1	4.2 – 4.4	20	0.5	1.25	-20 to +85	30	30	12.7 x 14.6 x 3.3	F	G
FG02-S-S	FG02-S-S1	4.4 – 5.0	20	0.5	1.25	-20 to +85	30	30	12.7 x 14.6 x 3.3	F	G
FG14A-S-S	FG14A-S-S1	4.5 – 5.3	20	0.5	1.25	-20 to +85	30	30	12.7 x 14.6 x 3.3	F	G
FG24B-S-S	FG24B-S-S1	5.2 – 5.9	20	0.5	1.25	-20 to +85	30	30	12.7 x 14.6 x 3.3	F	G
FG27-S-S	FG27-S-S1	5.0 – 6.5	17	0.6	1.3	-20 to +85	30	30	12.7 x 14.6 x 3.3	F	G
FH04-S-S	FH04-S-S1	5.8 – 6.5	20	0.5	1.25	-20 to +85	10	10	12.7 x 14.6 x 3.3	F	G
FH03B-S-S	FH03B-S-S1	5.9 – 6.4	20	0.5	1.25	-20 to +85	10	10	12.7 x 14.6 x 3.3	F	G
FH05A-S-S	FH05A-S-S1	6.4 – 7.2	20	0.5	1.25	-20 to +85	10	10	12.7 x 14.6 x 3.3	F	G
FH23C-S-S	FH23C-S-S1	7.1 – 7.9	20	0.5	1.25	-20 to +85	10	10	12.7 x 14.6 x 3.3	F	G
FH07-S-S	FH07-S-S1	7.2 – 8.4	20	0.5	1.25	-20 to +85	10	10	12.7 x 14.6 x 3.3	F	G
FI03A-S-S	FI03A-S-S1	7.8 – 8.5	20	0.5	1.25	-20 to +85	10	10	12.7 x 14.6 x 3.3	F	G
FI19-S-S	FI19-S-S1	8.5 – 9.6	20	0.5	1.25	-20 to +85	10	10	8.9 x 12.07 x 3.3	H	I
FJ01C-S-S	FJ01C-S-S1	9.5 – 10.5	20	0.5	1.25	-20 to +85	10	10	8.9 x 12.07 x 3.3	H	I
FJ26-S-S	FJ26-S-S1	11.5 – 13.5	20	0.5	1.25	-20 to +85	10	10	8.9 x 12.07 x 3.3	H	I
FK02-S-S	FK02-S-S1	14.0 – 14.5	20	0.5	1.25	-20 to +85	10	10	8.9 x 12.07 x 3.3	H	I

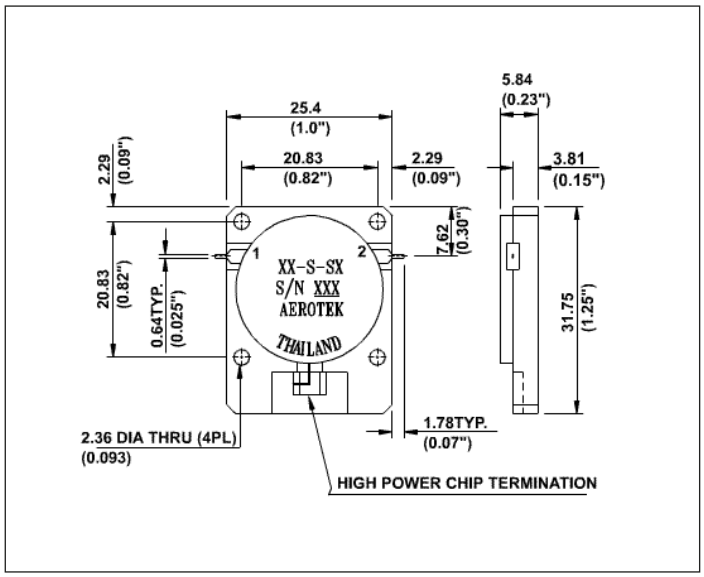
Model number see page 12

Miniature Drop-In Flange

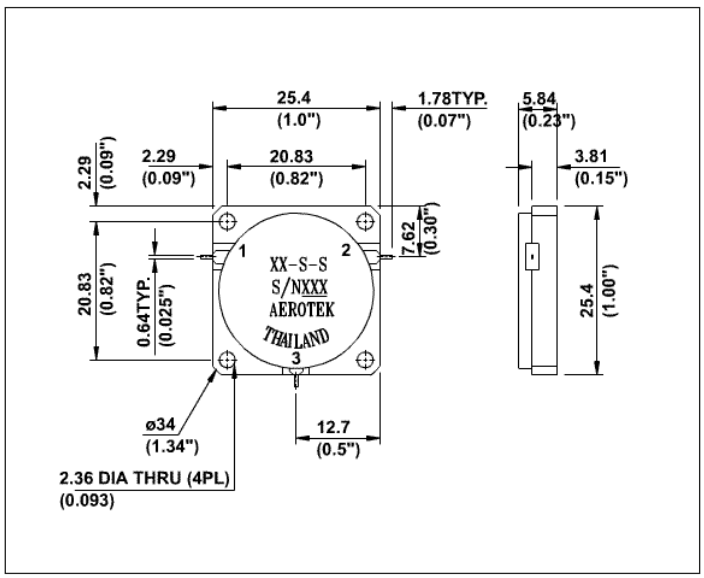
Model No.		Frequency (GHz)	Isolation min (dB)	Insertion Loss max (dB)	VSWR (max)	Operating Temp. (°C)	Circulator Power Rating (watts)		Dimension (w x l x t) (mm)	Outline Fig. (see Page 17)	
Circulator	Isolator						FWD	REV		Cir.	Iso.
FF02-2-S	FF02-2-S1	3.6 – 4.2	18	0.5	1.3	-20 to +85	30	30	9.53 x 15.75 x 5.33	MC1	MI1
FG01-2-S	FG01-2-S1	4.2 – 4.4	20	0.5	1.25	-20 to +85	30	30	9.53 x 15.75 x 5.33	MC1	MI1
FG02-2-S	FG02-2-S1	4.4 – 5.0	20	0.5	1.25	-20 to +85	30	30	9.53 x 15.75 x 5.33	MC1	MI1
FG03-2-S	FG03-2-S1	5.0 – 6.0	20	0.5	1.25	-20 to +85	30	30	9.53 x 15.75 x 5.33	MC1	MI1
FH04-2-S	FH04-2-S1	5.8 – 6.5	20	0.5	1.25	-20 to +85	10	10	9.53 x 15.75 x 5.33	MC1	MI1
FH05A-2-S	FH05A-2-S1	6.4 – 7.2	20	0.5	1.25	-20 to +85	10	10	9.53 x 15.75 x 5.33	MC1	MI1
FH23C-2-S	FH23C-2-S1	7.1 – 7.9	20	0.5	1.25	-20 to +85	10	10	9.53 x 15.75 x 5.33	MC1	MI1
FI03A-2-S	FI03A-2-S1	7.8 – 8.5	20	0.5	1.25	-20 to +85	5	5	9.53 x 15.75 x 5.33	MC1	MI1
FI23C-1-S	FI23C-1-S1	9.2 – 9.7	20	0.5	1.25	-20 to +85	5	5	6.35 x 12.7 x 4.5	MC2	MI2
FJ20-1-S	FJ20-1-S1	11.7 – 12.2	20	0.5	1.25	-20 to +85	5	5	6.35 x 12.7 x 4.5	MC2	MI2
FJ30-1-S	FJ30-1-S1	12.7 – 13.2	20	0.5	1.25	-20 to +85	5	5	6.35 x 12.7 x 4.5	MC2	MI2
FK06-1-S	FK06-1-S1	13.7 – 14.55	20	0.5	1.25	-20 to +85	5	5	6.35 x 12.7 x 4.5	MC2	MI2
FK21-1-S	FK21-1-S1	15.5 – 17.5	20	0.5	1.25	-20 to +85	5	5	6.35 x 12.7 x 4.5	MC2	MI2

Model number see page 12

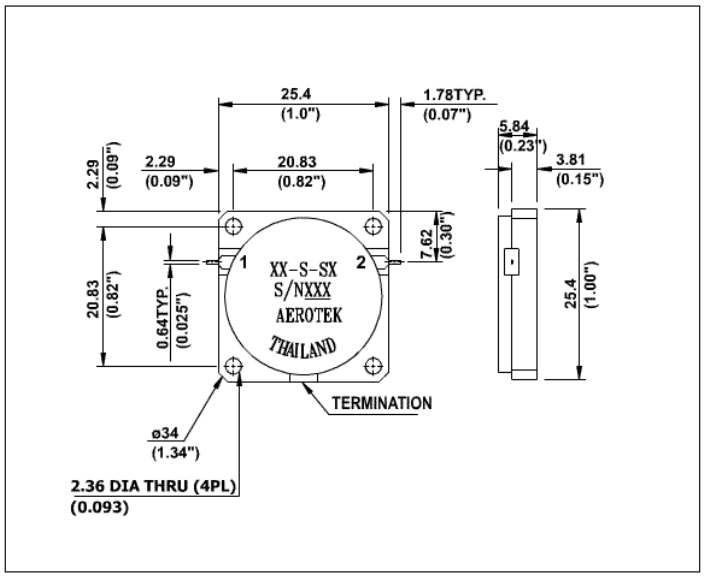
Outline Fig. A



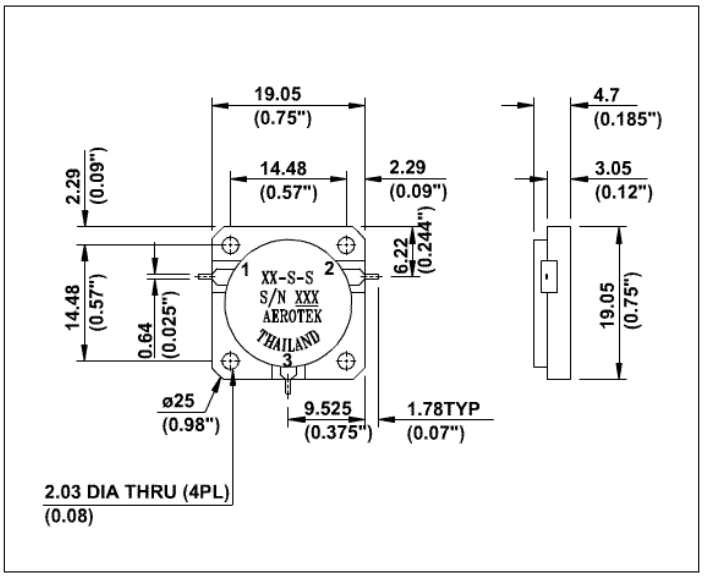
Outline Fig. B



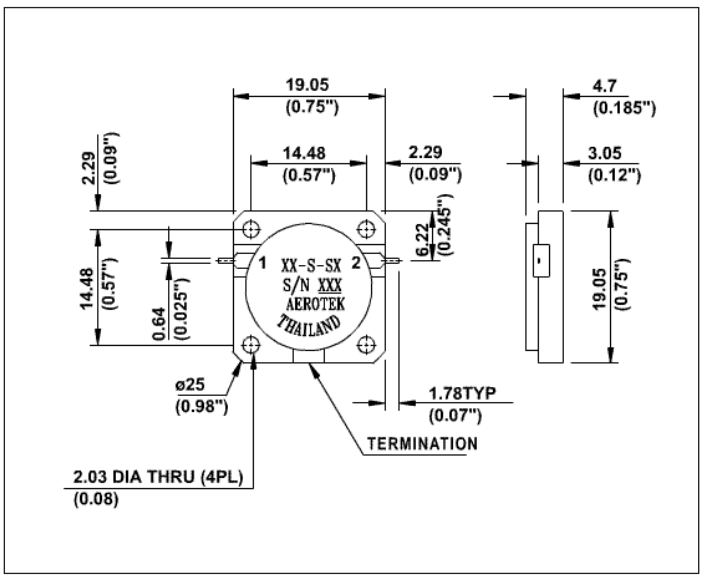
Outline Fig. C



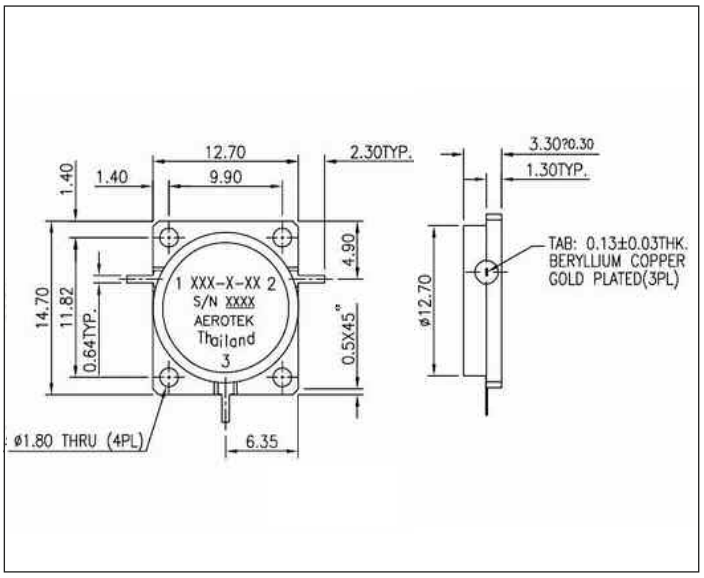
Outline Fig. D



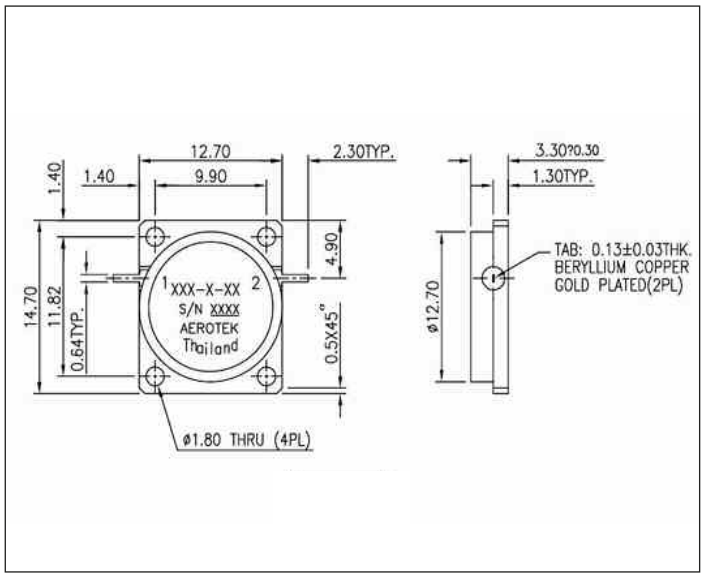
Outline Fig. E



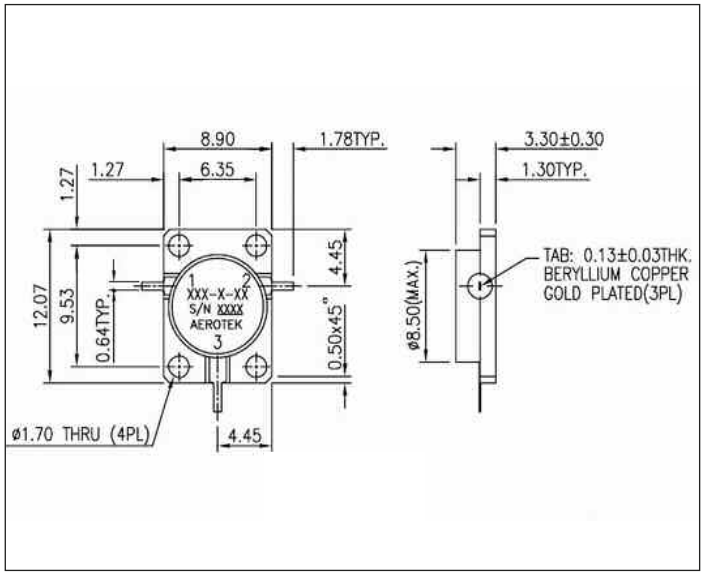
Outline Fig. F



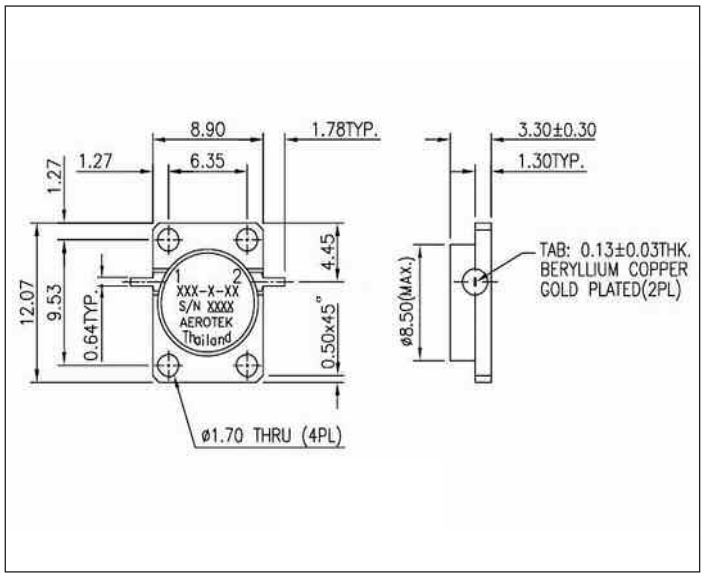
Outline Fig. G



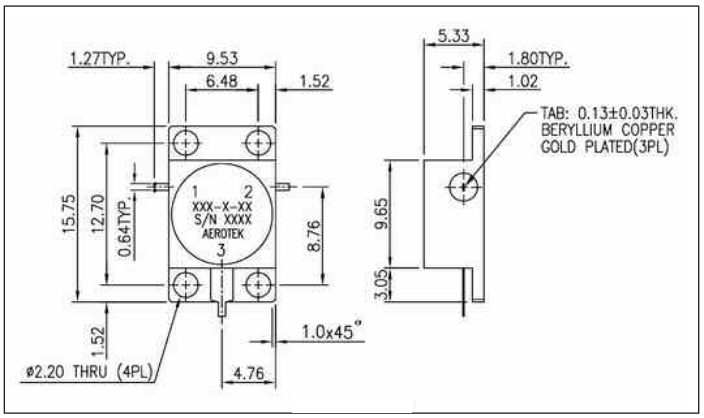
Outline Fig. H



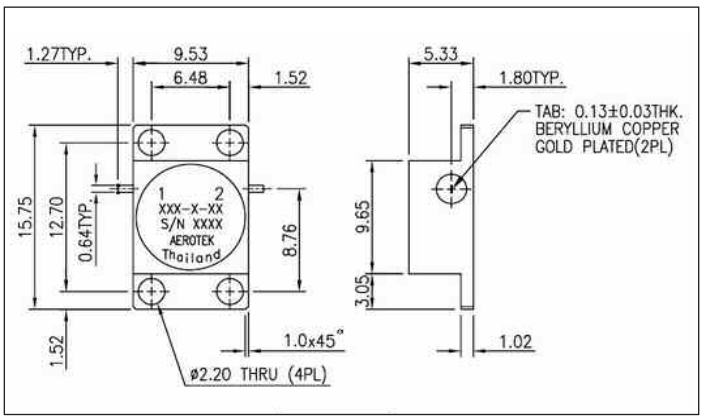
Outline Fig. I



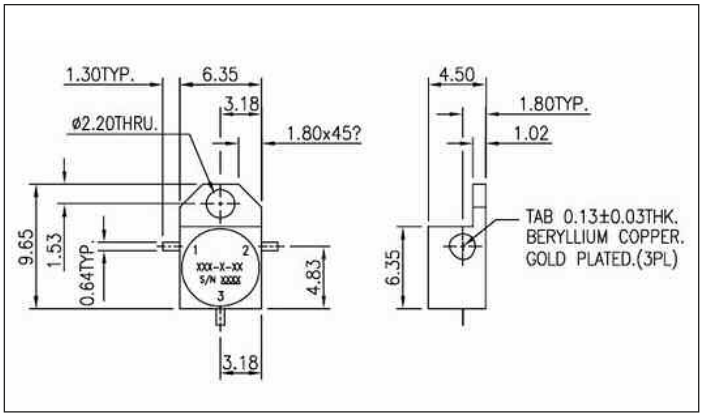
Outline Fig. MC 1



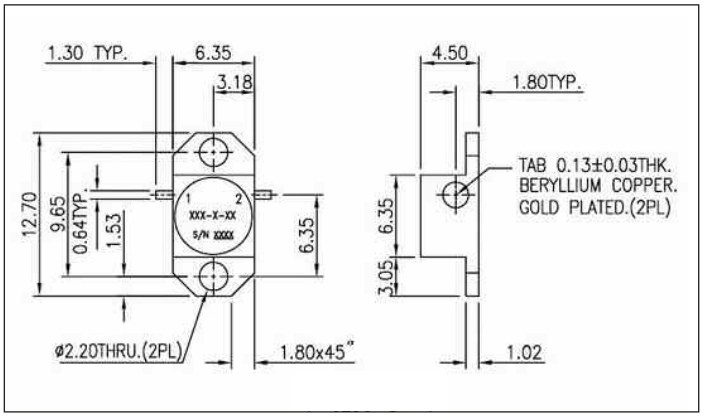
Outline Fig. MI 1



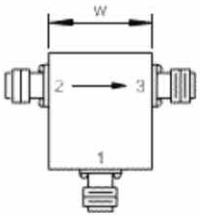
Outline Fig. MC 2



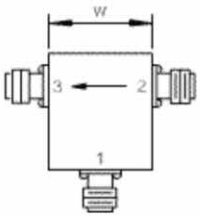
Outline Fig. MI 2



Coaxial Tunable Lumped Element Model Number Description



CLOCKWISE



ANTI CLOCKWISE

MODEL : L X X XX X-X A XXX/ X Option for special

L : LUMPED ELEMENT	I : ISOLATOR C : CIRCULATOR	Band (MHz)	Frequency range	Sub bandwidth	Connector types	INSERT "A" FOR ANTI-CLOCKWISE	Termination
		A 88 - 300 B 300 - 500 C 500 - 1000	SPECIFY BANDWIDTH	A - Z	1 SMA 3 TNC 10 N		GENDER OF CONNECTORS POSITION AND POWER RATING OF LOAD (IF REQUIRED) IN SEQUENCE OF PORT 1/2/3/ (4 if 4 ports) M for Male F for Female L1 for 1 watt Load L10 for 10 watts Load

Lumped coaxials

- Frequency from 88 to 512 MHz
- No NdFeB magnets
- Connectors for standard models are N female
- Termination load for standard models is 10 Watt
- Standard models are nickel-plated finished
- Customized design is available for specific frequency configuration, electrical specification, connector type or termination load up to 100 Watts

Tuning

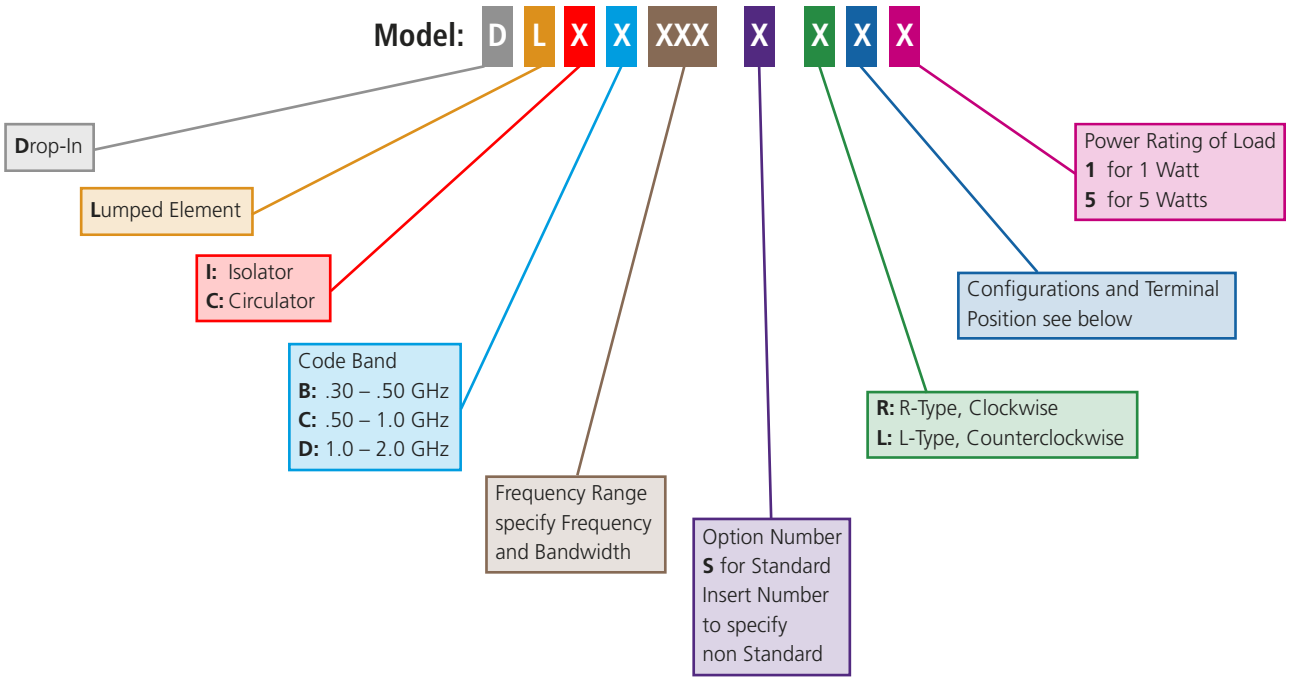
For standard models, Aerotek tunes the electrical performance at its centre frequency covering 4 % of bandwidth from the centre frequency – as specified below.

Anyhow, the customer can adjust the frequency range by himself by tuning the adjusted screws (these scres are covered under by white cap) with a screw driver. So the user needs to remove the white caps to see the adjusted screws responsible for the frequency tuning.

In addition the customer can also specify the required centre frequency in the purchasing phase already.

Model No.		Frequency Range (MHz)	At center frequency (Fc) Isolation Insertion			At band width 4 % Isolation Insertion			Operating Temp. (°C)	Circulator Power rating (watts)		Size w x l x t (mm)	Out-line No.	Weight (g)
Circulator	Isolator		db (min)	db (max)	VSWR (max)	dB (min)	dB (max)	VSWR (max)		Peak	CW			
LCA01-10FFF	LIA01-10L10FF	88 – 100	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 0 to +50	200	50	70 x 70 x 32	1	600
LCA03-10FFF	LIA03-10L10FF	100 – 115	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 0 to +50	200	50	70 x 70 x 32	1	600
LCA05-10FFF	LIA05-10L10FF	115 – 130	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 0 to +50	200	50	70 x 70 x 32	1	600
LCA08-10FFF	LIA08-10L10FF	130 – 150	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 0 to +50	200	50	70 x 70 x 32	1	600
LCA11-10FFF	LIA11-10L10FF	150 – 175	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 0 to +50	200	50	70 x 70 x 32	1	600
LCA15-10FFF	LIA15-10L10FF	175 – 205	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 -10 to +50	200	50	50 x 50 x 30	2	300
LCA19-10FFF	LIA19-10L10FF	205 – 230	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 -10 to +50	200	50	50 x 50 x 30	2	300
LCA23-10FFF	LIA23-10L10FF	230 – 265	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 -10 to +50	200	50	50 x 50 x 30	2	300
LCA28-10FFF	LIA28-10L10FF	265 – 300	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 -10 to +50	200	50	50 x 50 x 30	2	300
LCB19-10FFF	LIB19-10L10FF	400 – 450	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 -10 to +50	200	50	50 x 50 x 30	2	300
LCB28-10FFF	LIB28-10L10FF	450 – 512	25 22	0.25 0.35	1.12 1.20	23 20	0.40 0.50	1.16 1.25	+25 -10 to +50	200	50	50 x 50 x 30	2	300

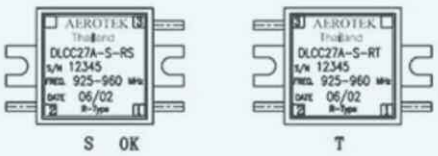
Drop-In Lumped Element Model Number Description



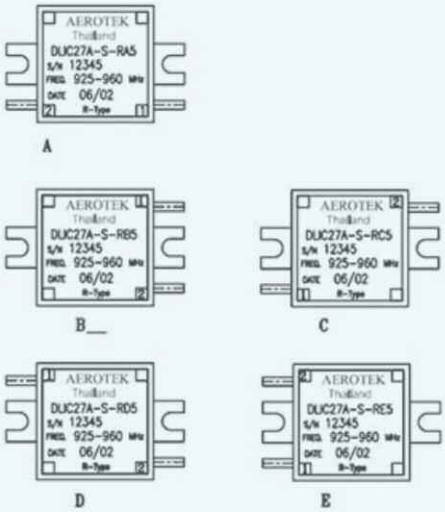
Configuration and Terminal Position

CLOCKWISE (R-TYPE)

Circulator

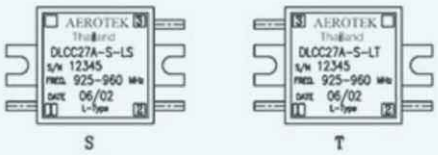


Isolator

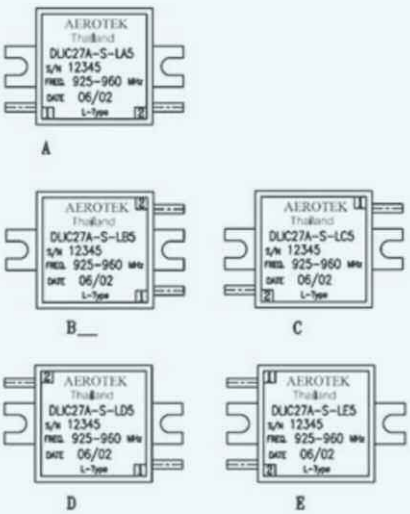


COUNTERCLOCKWISE (L-TYPE)

Circulator



Isolator



Drop-In Lumped

- Frequency from 800 to 1000 MHz
- No NdFeB magnets
- Termination load for standard models is 5 Watt
- Finish nickel-plated
- Customized design is available for specific frequency range, specification or direction of circulation

Model No.		Frequency Range (MHz)	Band-width (%)	Isolation db (min)	Insertion dB (max)	VSWR (max)	Circulator Power Rating (watts)		Operating Temp. (°C)	Dimension (w x l x t) (mm)
Circulator	Isolator						Peak	CW		
DLCC19D-S-RS	DLIC19D-S-RA5	880 – 825	3	23 18	0.4 0.6	1.16 1.30			+25 -35 to +85	20 x 20 x 10
DLCC20-S-RS	DLIC20-SRA5	824 – 849	3	23 18	0.4 0.6	1.16 1.30			+25 -35 to +85	20 x 20 x 10
DLCC23-S-RS	DLIC23-S-RA5	860 – 900	4.5	23 18	0.4 0.6	1.16 1.30			+25 -35 to +85	20 x 20 x 10
DLCC25-S-RS	DLIC25-S-RA5	869 – 894	2.8	23 18	0.4 0.6	1.16 1.30			+25 -35 to +85	20 x 20 x 10
DLCC23B-S-RS	DLIC23B-S-RA5	874 – 905	3.5	23 18	0.4 0.6	1.16 1.30			+25 -35 to +85	20 x 20 x 10
DLCC24B-S-RS	DLIC24B-S-RA5	880 – 915	3.9	23 18	0.4 0.6	1.16 1.30			+25 -35 to +85	20 x 20 x 10
DLCC27A-S-RS	DLIC27A-S-RA5	925 – 960	3.7	23 18	0.4 0.6	1.16 1.30			+25 -35 to +85	20 x 20 x 10

Isolator and Circulator Products from ARGUS-ET

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WAVEGUIDE DEVICES

APPLICATION NOTE FOR THE WAVEGUIDE DEVICES

MEDIUM POWER WAVEGUIDE T–JUNCTION CIRCULATORS _ _ _ _ 7.25 – 26.50 GHZ

LOW POWER WAVEGUIDE T-JUNCTION CIRCULATORS _ _ _ _ _ _ _ 24.00 – 60.50 GHZ

BROADBAND WAVEGUIDE T-JUNCTION CIRCULATORS _ _ _ _ _ _ _ 8.20 – 40.00 GHZ

LOW POWER WAVEGUIDE T-JUNCTION ISOLATORS _ _ _ _ _ _ _ _ 7.25 – 26.50 GHZ

LOW POWER WAVEGUIDE T-JUNCTION ISOLATORS _ _ _ _ _ _ _ _ 24.00 – 63.50 GHZ

BROADBAND WAVEGUIDE T-JUNCTION ISOLATORS _ _ _ _ _ _ _ _ 8.20 – 40.00 GHZ

WAVEGUIDE T-JUNCTION ISOLATORS B-SERIES (MIN. DEVICES) _ _ 8.50 – 40.00 GHZ

WAVEGUIDE DUAL JUNCTION ISOLATORS D-SERIES _ _ _ _ _ _ _ _ 8.20 – 30.50 GHZ

WAVEGUIDE ISOLATORS R-SERIES (RIGHT ANGLE DEVICE)

WAVEGUIDE T-JUNCTION ISOLATORS S-SERIES (SLIM DEVICES) _ _ 17.70 – 41.00 GHZ

WAVEGUIDE ULTRA SMALL ISOLATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 12.70 – 26.50 GHZ

WAVEGUIDE DUPLEXER _ 17.7 – 26.5 GHZ

MICROSTRIP DEVICES

APPLICATION NOTE FOR THE MICROSTRIP DEVICES

FDK COMPATIBLE CARRIER TYPE ISOLATORS _ _ _ _ _ _ _ _ _ _ _ _ 2.10 – 13.30 GHZ

FDK COMPATIBLE CARRIER TYPE ISOLATORS _ _ _ _ _ _ _ _ _ _ _ _ 13.50 – 40.00 GHZ

METAL BACKED TYPE CIRCULATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 6.3 – 41.5 GHZ

CARRIER TYPE CIRCULATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2.1 – 40.0 GHZ

CARRIER TYPE ISOLATORS SHAPE-4H _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4.20 – 15.60 GHZ

CARRIER TYPE ISOLATORS SHAPE-4H _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 14.00 – 32.00 GHZ

METAL BACKED TYPE ISOLATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3.40 – 40.00 GHZ

CARRIER TYPE ISOLATORS _ 3.10 – 10.60 GHZ

CARRIER TYPE ISOLATORS _ 9.50 – 64.00 GHZ

DUAL MICROSTRIP CARRIER TYPE _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3.10 – 39.50 GHZ

SUBSTRATE TYPE ISOLATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2.10 – 10.50 GHZ

SUBSTRATE TYPE ISOLATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 8.00 – 26.50 GHZ

SUBSTRATE TYPE ISOLATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 23.50 – 64.00 GHZ

SUBSTRATE TYPE RIGHT ANGLE ISOLATORS _ _ _ _ _ _ _ _ _ _ _ _ 17.00 – 18.30 GHZ

SUBSTRATE TYPE CIRCULATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2.1 – 15.7 GHZ

SUBSTRATE TYPE CIRCULATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 16.5 – 43.0 GHZ

SMT DEVICES

APPLICATION NOTE FOR THE SMT DEVICES

SURFACE MOUNT CIRCULATORS _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2.4 – 27.0 GHZ

COAXIAL DEVICES

APPLICATION NOTE FOR THE COAXIAL DEVICES

COAXIAL ISOLATORS _ 17.00 – 50.00 GHZ

BROADBAND COAXIAL ISOLATORS WITH K-CONNECTORS _ _ _ _ 18.00 – 40.00 GHZ

COAXIAL CIRCULATORS _ 25.00 – 45.00 GHZ

DROP-IN DEVICES

APPLICATION NOTE FOR THE DROP-IN DEVICES

DROP-IN ISOLATORS _ 0.57 – 9.6 GHZ

DROP-IN CIRCULATORS _ 0.6 – 2.2 GHZ

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Telemeter Electronic

Germany

Telemeter Electronic GmbH
Joseph-Gaensler-Straße 10
86609 Donauwoerth
Phone +49 906 70693-0
Fax +49 906 70693-50
info@telemeter.de
www.telemeter.info

Switzerland

Telemeter Electronic GmbH
Romanshornerstrasse 117
8280 Kreuzlingen
Phone +41 71 6992020
Fax +41 71 6992024
info@telemeter.ch
www.telemeter.info

Czech Republic

Telemeter Electronic s.r.o.
České Vrbné 2364
37011 České Budějovice
Phone +420 38 5310637
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