

Non-Catalog Model

Directional Coupler

RCM-12-4-75

Important Note

This is a non-catalog model and can be manufactured on specific request.
Pricing and delivery information can be supplied upon request.



Please click "Back", and then click "Contact Us" for Applications support.

CASE STYLE : DB714

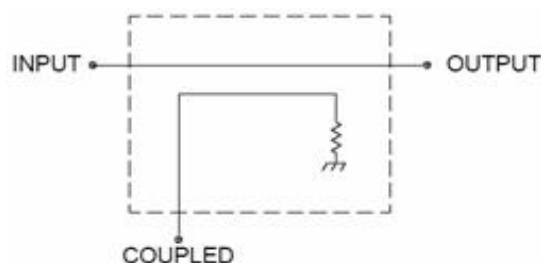
ELECTRICAL SPECIFICATIONS 75Ω @ +25°C					
Parameter		Min.	Typ.	Max.	Units
Frequency		20		1000	MHz
Coupling	Nominal		12.8 ± 0.5		dB
	Flatness		± 0.9		dB
Mainline Loss *	20-200 MHz		0.70	1.20	dB
	200-500 MHz		0.70	1.30	dB
	500-1000 MHz		0.80	1.50	dB
Directivity	20-200 MHz	15	20		dB
	200-500 MHz		15		dB
	500-1000 MHz		11		dB
VSWR			1.2		(:1)
Power Input	20-200 MHz		1.0		W
	200-1000 MHz		1.0		W

Notes: * Mainline loss includes theoretical coupled power loss of 0.234 dB at 12.8 dB coupling.
Derate linearly to 35% max. input power at 100°C
Aqueous washable. For non-aqueous requirements, LRDC units available in case style QQQ130.
Denotes 75 ohm models.
For PCB layout, please contact our Applications Dept. or consult our website.
For pin connection kd and lt : external resistor required

MAXIMUM RATINGS	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

PIN CONNECTIONS	
INPUT	3
OUTPUT	4
COUPLED FORWARD	1
NOT USED	5
75Ω TERM. EXTERNAL	6
GROUND	2

Functional Diagram



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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	(dB) OUT	CPL
20.0	0.77	13.07	22.46	19.83	23.29	21.80
40.0	0.69	12.99	22.11	22.18	29.38	24.15
80.0	0.65	12.97	21.30	23.63	40.21	25.77
300.0	0.67	12.88	17.05	21.28	25.41	23.99
400.0	0.70	12.86	15.53	20.56	22.81	23.09
500.0	0.73	12.79	14.40	20.19	22.25	22.47
700.0	0.76	12.58	12.82	19.87	20.74	20.07
800.0	0.80	12.47	12.23	20.90	21.16	19.16
900.0	0.84	12.33	11.65	22.51	22.56	18.51
1000.0	0.90	12.19	11.09	24.36	23.93	18.45

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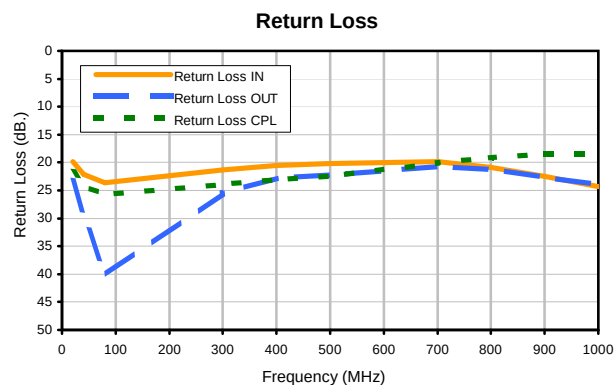
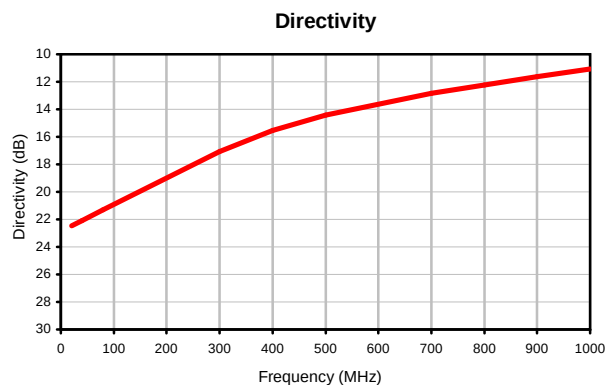
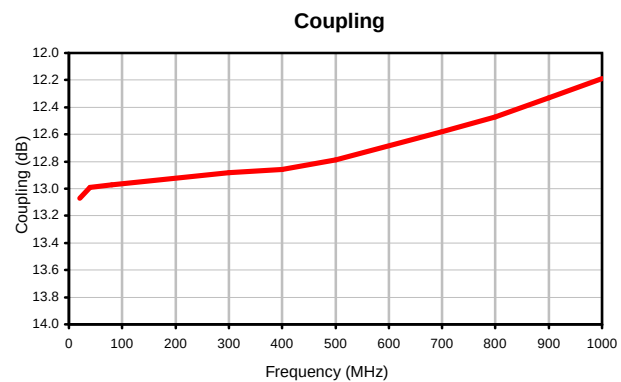
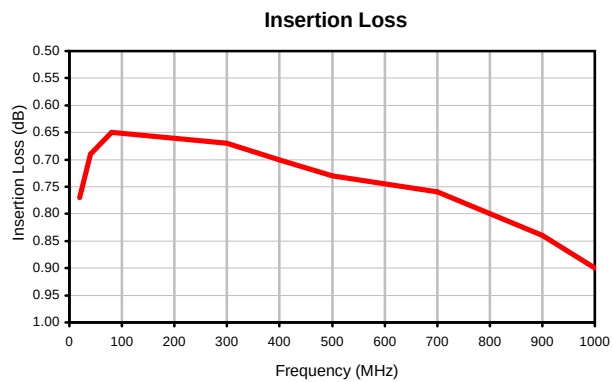
The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



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Typical Performance Curves



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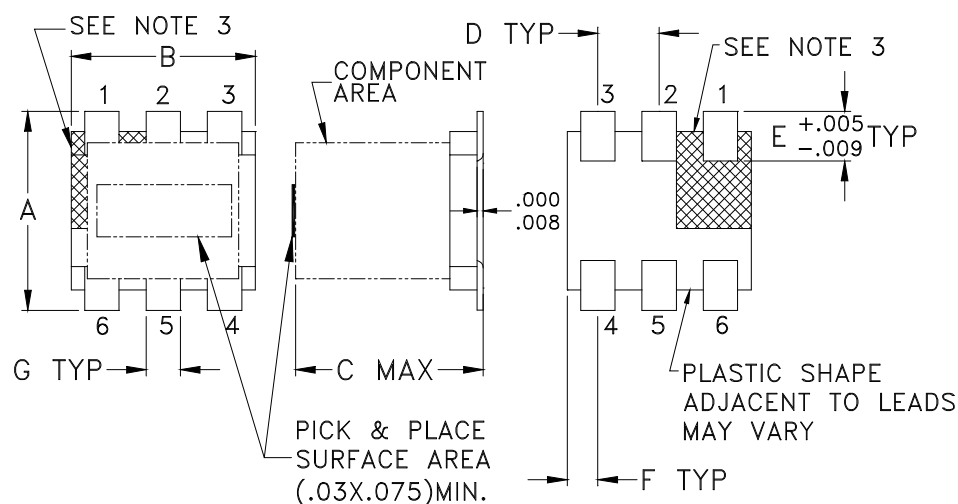


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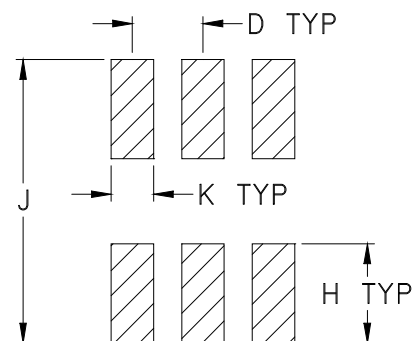


Outline Dimensions

DB714



PCB Land Pattern



Suggested Layout,
Tolerance to be within $\pm .002$

CASE #	A	B	C	D	E	F	G	H	J	K	WT. GRAM
DB714	.160 (4.06)	.150 (3.81)	.160 (4.06)	.050 (1.27)	.040 (1.02)	.025 (0.64)	.028 (0.71)	.065 (1.65)	.190 (4.83)	.030 (0.76)	.15

Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .01$; 3Pl. $\pm .005$

Notes:

- Case material: Plastic.
- Termination finish:
For RoHS Case Styles: Tin plate over Nickel plate. All models, (+) suffix.
For RoHS-5 Case Styles: Tin-Lead plate. All models, no (+) suffix.
- Lead #1 identifier shall be located in the cross-hatched area shown.
Identifier may be either a molded or marked feature.



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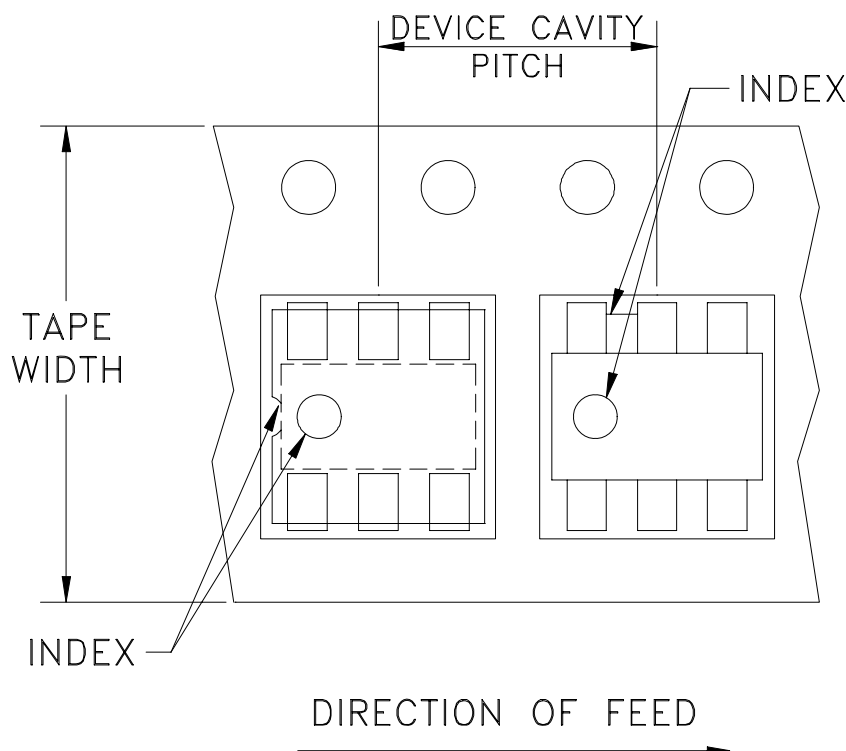


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RF/IF MICROWAVE COMPONENTS

Tape & Reel Packaging TR-F47

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel see note
12	8	13	1000, 2000
		7	20, 50, 100, 200, 500

Note: Please consult individual model data sheet to determine device per reel availability.

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

Go to: www.minicircuits.com/pages/pdfs/tape.pdf



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