Engineering Development Model

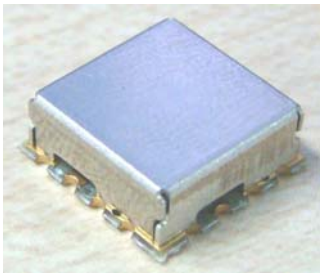
Band Pass Filter BPF-EDU1145

Surface Mount

Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability.
At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.

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

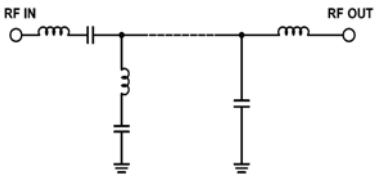


CASE STYLE : CK1113

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C

Parameter	Min.	Typ.	Max.	Units
Passband (Loss< 3 dB)	410		470	MHz
Center frequency		440		MHz
Low Band (Loss > 40 dB)	DC		100	MHz
Low Band (Loss > 25 dB)	100		340	MHz
High Band (Loss > 25 dB)	540		600	MHz
High Band (Loss > 40 dB)	600		1500	MHz
Passband VSWR		1.4	2	(:1)
Stopband VSWR		20		(:1)

Functional Schematic



MAXIMUM RATINGS

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	+27dBm

PIN CONNECTIONS

Input	2
Output	10
Not Connected	14
Case Ground	1,3,4,5,6,7,8,9,11,12,13,15,16

Band Pass Filter BPF-EDU1145

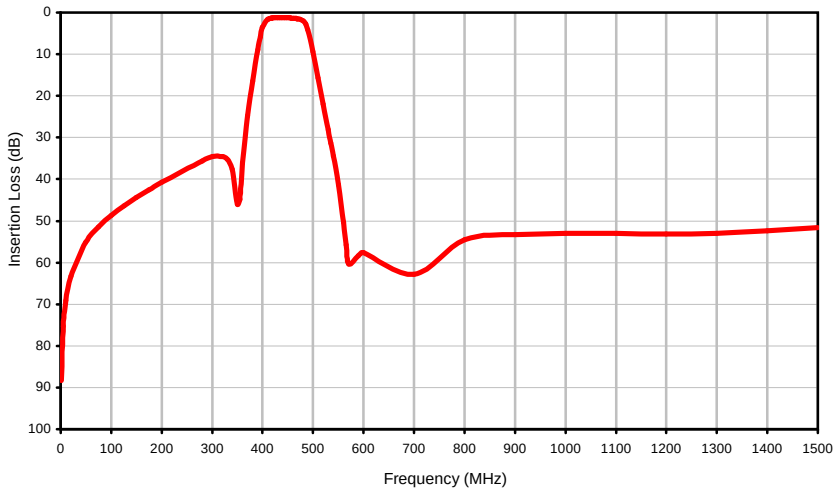
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)
1	88.30	0.00
50	55.08	0.01
100	48.62	0.02
340	37.64	0.31
380	16.37	0.86
390	8.98	1.72
395	5.88	2.85
400	3.59	5.03
410	1.66	13.26
420	1.30	18.86
430	1.19	25.91
440	1.17	25.16
450	1.25	17.55
460	1.37	15.54
470	1.51	17.65
485	2.69	12.98
490	4.17	7.76
500	9.36	3.05
510	15.71	1.61
530	28.18	0.81
540	34.44	0.65
600	57.63	0.27
1000	52.99	0.18
1500	51.56	0.27

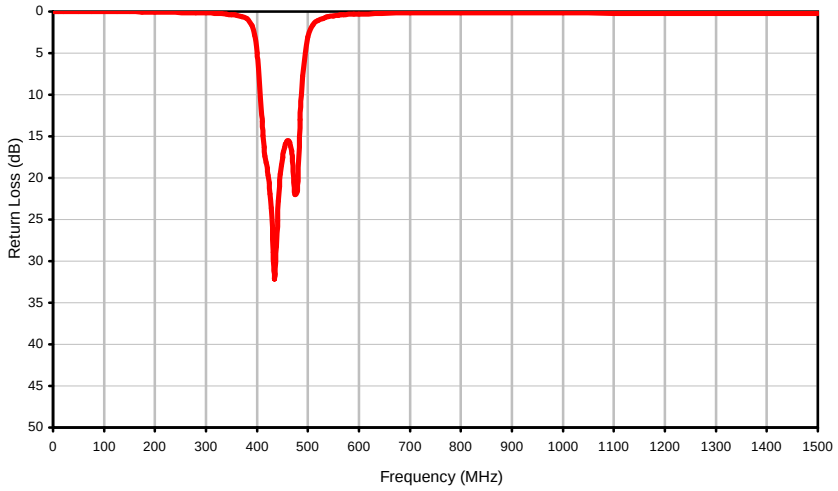
FREQUENCY (MHz)	GROUP DELAY (nsec)
400	13.12
410	12.73
414	11.89
420	10.54
424	9.85
428	9.34
430	9.15
432	9.00
434	8.88
436	8.77
438	8.68
440	8.61
442	8.56
444	8.54
446	8.51
448	8.51
450	8.53
454	8.62
458	8.81
460	8.95
466	9.57
470	10.17
480	11.97
500	10.40

Typical Performance Curves

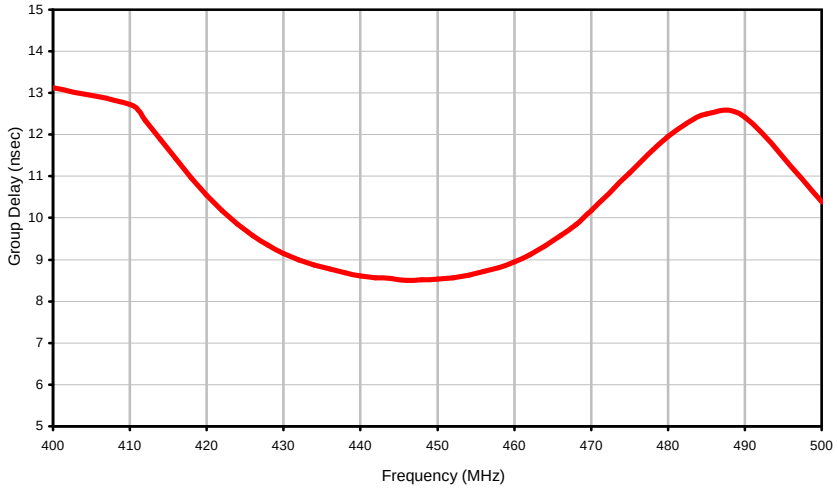
Insertion Loss



Return Loss



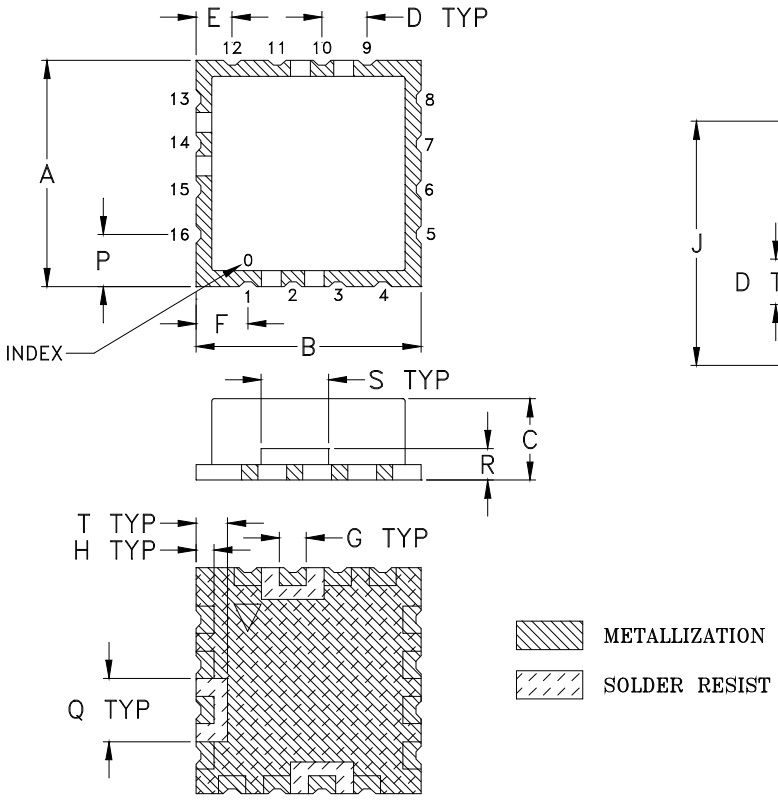
Group Delay



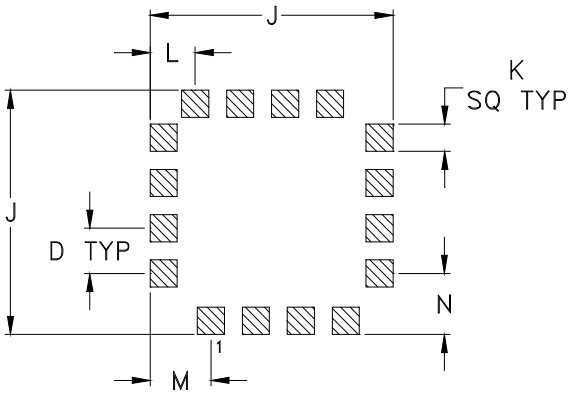
Case Style CK

CK1113

Outline Dimensions



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

CASE #	A	B	C	D	E	F	G	H	J	K
CK1113	.500 (12.70)	.500 (12.70)	.220 (5.59)	.100 (2.54)	.080 (2.03)	.115 (2.92)	.060 (1.52)	.040 (1.02)	.540 (13.72)	.060 (1.52)

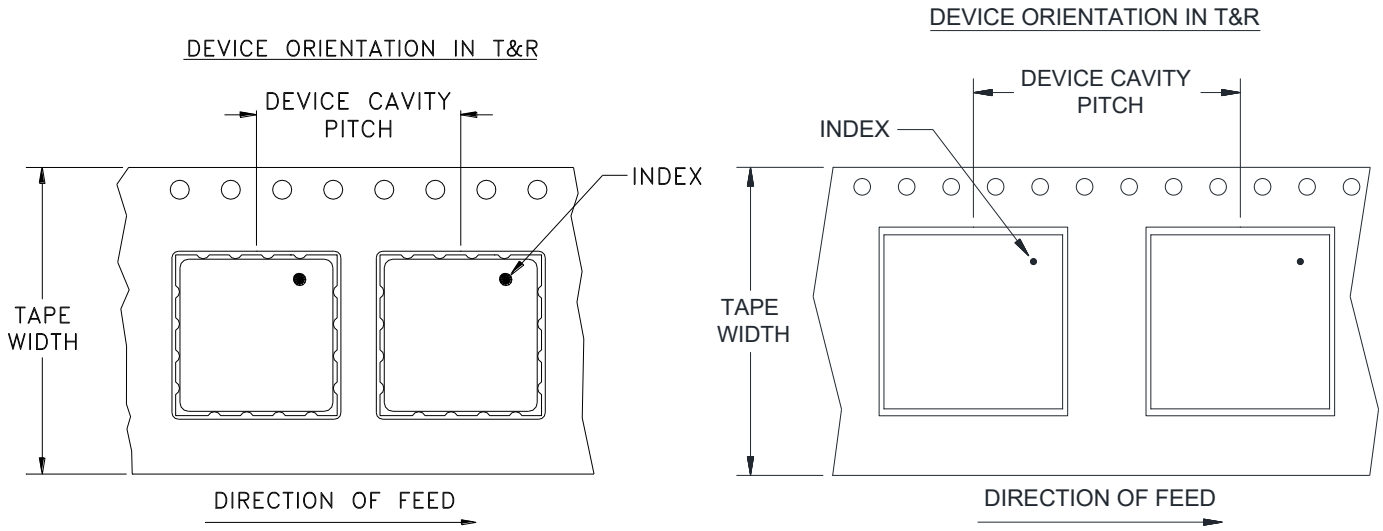
CASE #	L	M	N	P	Q	R	S	T	WT. GRAM
CK1113	.100 (2.54)	.135 (3.43)	.135 (3.43)	.115 (2.92)	.140 (3.56)	.070 (1.78)	.150 (3.81)	.070 (1.78)	1.2

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .03; 3Pl. ± .015

Notes:

1. Case material: Nickel-Silver alloy.
2. Base: Printed wiring laminate.
3. Termination finish:
   For RoHS Case Styles: 3-5 µ inch (.08-.13 microns) Gold over 120-240 µ inch (3.05-6.10 microns) Nickel plate. All models, (+) suffix.

Tape & Reel Packaging TR-F37



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel	
24	16	7	Small quantity standards (see note)	10
				20
				50
				100
		13	Standard	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.

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