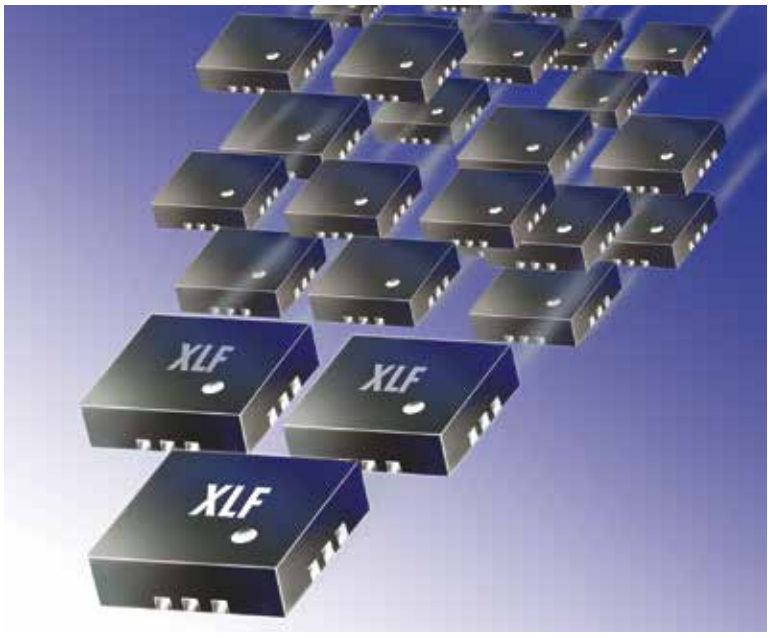
REFLECTIONLESS FILTERS *Designer's Kit K1-XFLTR+*

MINI-CIRCUITS DESIGNER'S KITS
SPEED UP
THE SOLUTION!



DC to 9.8 GHz

X-Series Reflectionless Filters

- Patented design eliminates in band spurs
- Pass band cut-off up to 9.8 GHz
- Stop band up to 34 GHz
- Excellent repeatability through IPD* process

*IPD – Integrated Passive Device is a GaAs semiconductor process

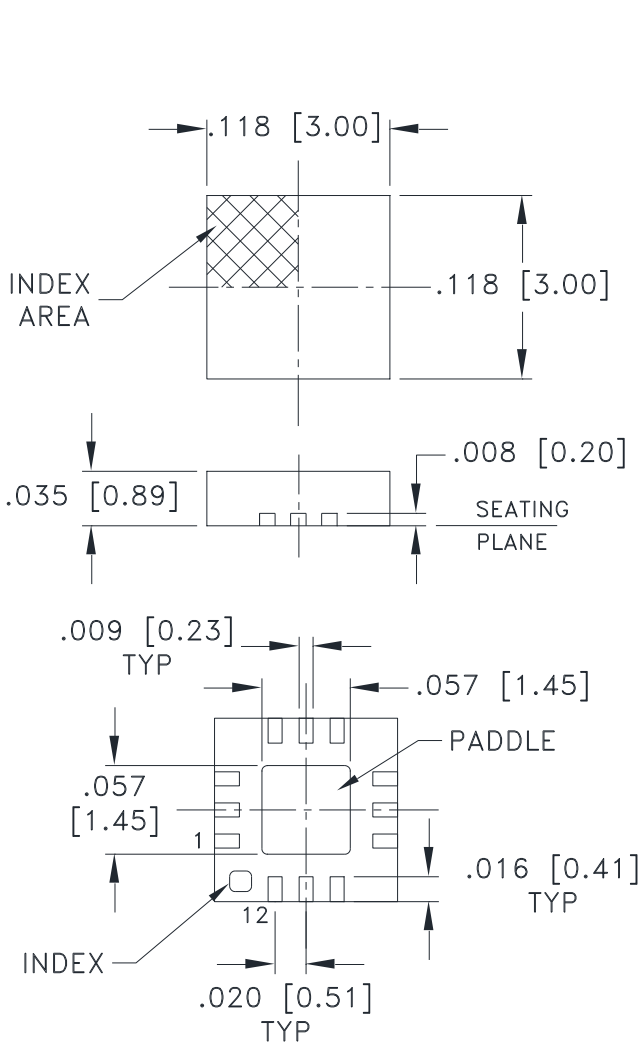
Kit K1-XFLTR+ LOW PASS FILTERS *(10 models, 4 of each, 40 total)*

Model Number	Pass-band (MHz)		Stop-band (MHz)	VSWR (:1)	
	I.L.=1 dB typ.	I.L.=3 dB typ.	I.L.=14 dB typ.	pass-band	stop-band
XLF-151+	0-150	280	460-2800	1.2	1.8
XLF-221+	0-220	370	570-3500	1.2	1.7
XLF-421+	0-420	610	900-5200	1.2	1.7
XLF-551+	0-550	770	1140-5800	1.2	1.6
XLF-861+	0-860	1150	1700-7500	1.2	2.3
XLF-122+	0-1150	1510	2190-10000	1.2	1.5
XLF-192+	0-1900	2400	3480-11200	1.2	2.1
XLF-252+	0-2500	3220	4550-16000	1.3	1.8
XLF-332+	0-3250	4120	5900-17000	1.2	2.0
XLF-732+	0-7300	9800	14300-34000	1.2	3.0

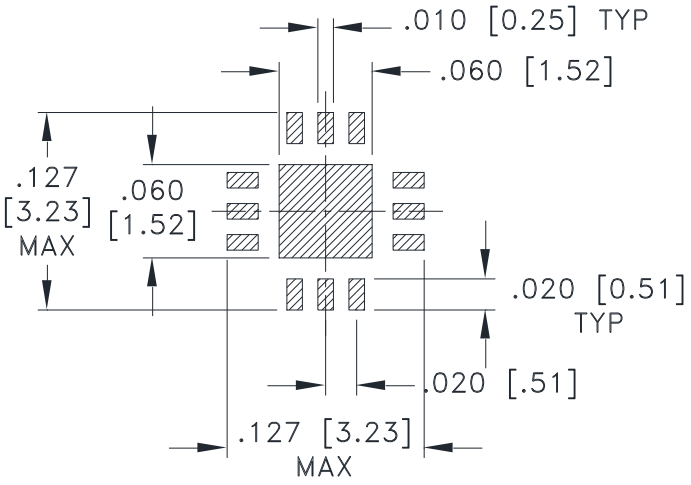
Case Style DQ

DQ1225

Outline Dimensions



PCB Land Pattern



SUGGESTED LAYOUT,
TOLERANCE TO BE WITHIN ±.002

Weight: .02 Grams

Dimensions are in inches (mm). Tolerances: 2Pl. ± .01; 3 Pl. ± .004

Notes:

1. Case material: Plastic.
2. Termination finish:
   - For RoHS Case Styles: Tin-Silver alloy plate over Nickel barrier or Matte-Tin. All models, (+) suffix. See Data sheet.
   - For RoHS-5 Case Styles: Tin-Lead plate. All models, no (+) suffix.

Mini-Circuits®
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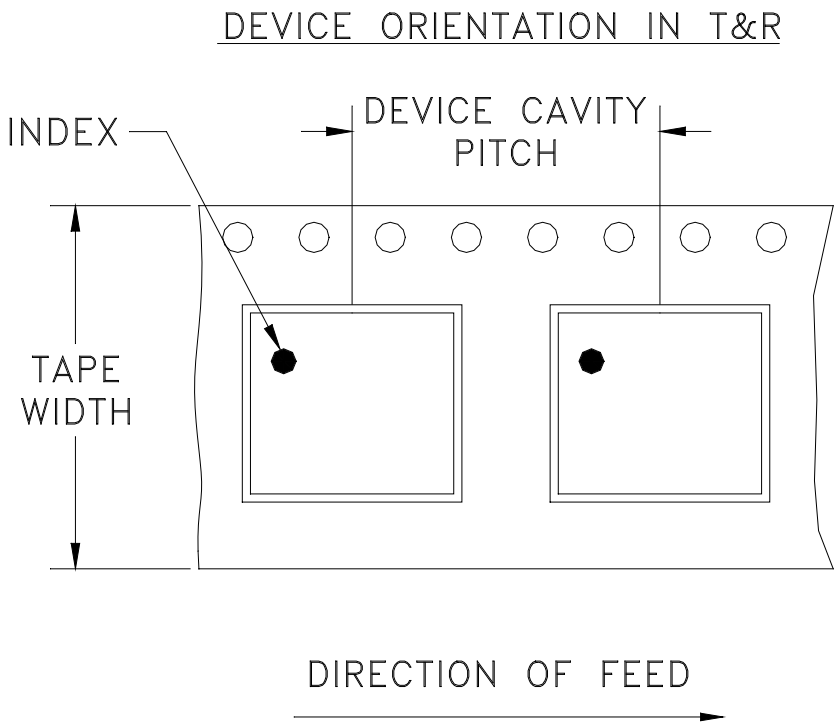
Tape & Reel Packaging TR-F66



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel see note	
8	4	7	Small quantity standard	20
				50
				100
				200
				500
		7	Standard	1000, 2000, 3000

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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Environmental Specifications ENV82

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 105°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-65° to 150° C Ambient Environment	Individual Model Data Sheet
Autoclave	15 psig, 100% RH, 121°C, 96 hours	JESD22-A102-C, Condition C
Temperature Cycling	-65° to 150°C, 100 cycles	JESD22-A104
Temperature Humidity	85°C/ 85% RH, 168 hours	JESD22-113
Solder Reflow Heat	Sn-Pb Eutetic Process: 240°C peak Pb-Free Process: 260°C peak	J-STD-020, Table 4-1, 4-2 and 5-2; Figure 5-1
Moisture Sensitivity: Level 1	Bake at 125°C for 24 hours Soak at 85°C/85% RH for 168 hours, Reflow 3 cycles at 240°C peak (Non-RoHS) or 260°C (RoHS)	J-STD-020C
Solderability	10X magnification, 95% coverage	JESD22-B102, Method 1: Dip and Look Test
Marking Resistance to Solvents	Isopropyl alcohol + mineral spirits at 25°C; terpene defluxer at 25°C; distilled water + proylene glycol monomethyl ether + monoethanolamine at 63°C to 70°C	MIL-STD-202, Method 215

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