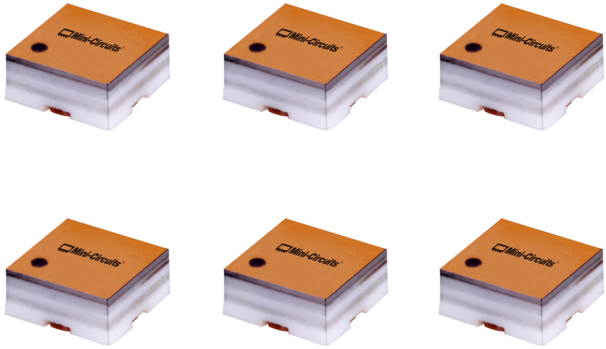




## DESIGNER'S KIT K1-RCAT+

# Fixed Attenuators

50Ω DC to 20 GHz



### FEATURES

- Hi Rel, Hermetic Ceramic Case
- Ultra Wideband, 50Ω
- 0, 3, 6, 10, 15, 20 dB attenuation
- Input power 2 W max.
- Low profile 1.1mm
- Thermally optimized design

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



### K1-RCAT+ ELECTRICAL SPECIFICATIONS

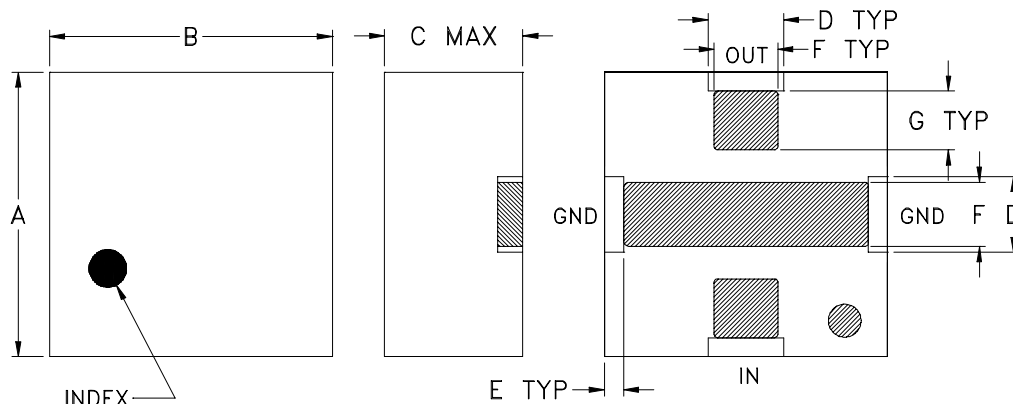
(6 models, 10 of each, 6 total)

Model	Frequency (GHz) $f_L$ - $f_U$	Attenuation (dB) Typ.			Return Loss (dB) Typ.			Input Power <sup>1</sup> (W) Max.
		1 GHz	10 GHz	20 GHz	1 GHz	10 GHz	20 GHz	
RCAT-00+	DC-20	0.0	0.2	0.5	30	19	12	2.0
RCAT-03+	DC-20	3.0	3.4	3.9	31	20	14	2.0
RCAT-06+	DC-20	6.1	6.5	7.5	30	21	15	2.0
RCAT-10+	DC-20	10.1	10.7	12.3	30	20	15	2.0
RCAT-15+	DC-20	15.1	16.0	19.0	30	20	15	1.6
RCAT-20+	DC-20	20.1	21.4	27.0	30	21	14	1.5

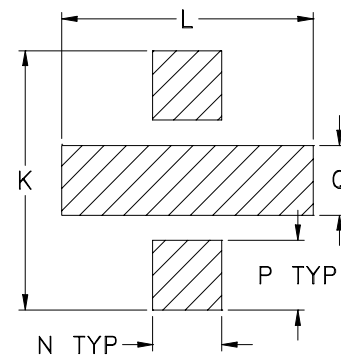
1. RF power at 25°C case temperature. Derate linearly to 0.33 W at 125°C.

## Outline Dimensions

LZ1737



## PCB Land Pattern



Suggested Layout  
Pattern to be within  $\pm .002$

CASE #	A	B	C	D	E	F	G	H	J	K	L	M
LZ1737	.089 (2.250)	.089 (2.250)	.043 (1.10)	.024 (.600)	.006 (.150)	.020 (.508)	.018 (.465)	- -	.010 (.255)	.089 (2.26)	.089 (2.26)	- -

CASE #	N	P	Q	R	WT. GRAM
LZ1737	.022 (.550)	.026 (.66)	.017 (.432)	- -	.015

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

### Notes:

1. Case material: Ceramic.
2. Base material: 36 mil thk laminate.
3. Termination finish: Electroless Nickel-Palladium-Gold Plate.

**Mini-Circuits®**

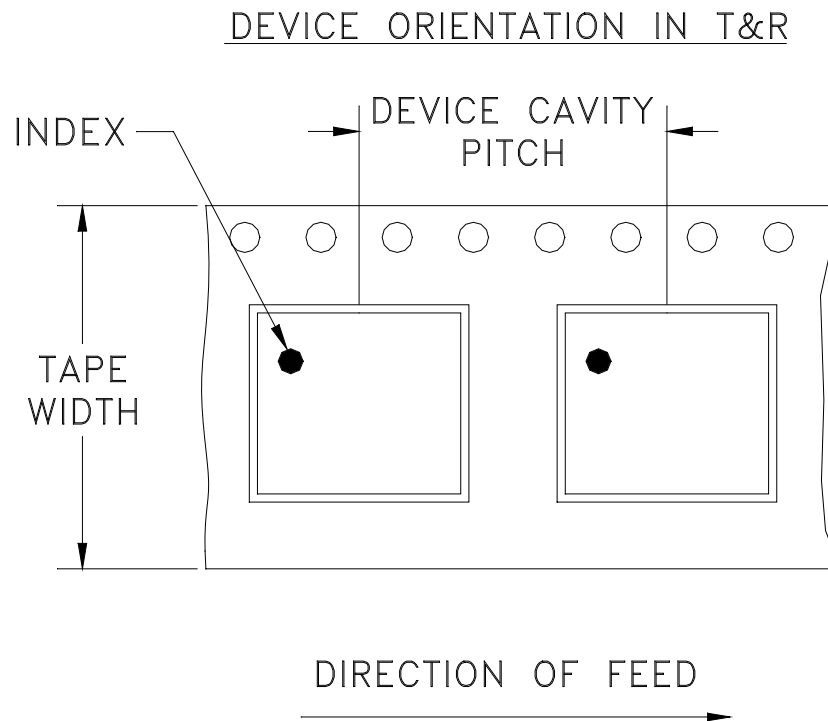
INTERNET <http://www.minicircuits.com>

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Mini-Circuits ISO 9001 & ISO 14001 Certified

# 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](http://www.minicircuits.com/pages/pdfs/tape.pdf)

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Mini-Circuits ISO 9001 & ISO 14001 Certified

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 125° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-65° to 150° C Ambient Environment	Individual Model Data Sheet
Thermal Shock (device level)	-55° to 125°C, 100 cycles	MIL-STD-202, Method 107
Thermal Shock (board level)	-55° to 150°C, 1000 cycles	MIL-STD-202, Method 107
HTOL	1000 hours, 25°C, @ rated power	MIL-STD-202, Method 108, cond D.
Constant Acceleration	Y1 plane only, 30 Kg	MIL-STD-883, Method 2001, Cond. E
Vibration	10-2000MHz sine, 20g, 3 axis	MIL-STD-202, Method 204, Cond. D
Mechanical Shock	50g, 11 ms, 1/2-sine, 18 shocks: 3 each direction, each of 3 axes	MIL-STD-202, Method 213, Condition A
PIND	20G's @130 Hz	MIL-STD-750, Method 2052.2
Resistance to Soldering Heat	3X Reflow, Peak Temperature 260°C	JESD22-B102
Moisture Sensitivity Level	Hermetic device, MSL-1 by construction	JESD22-A113, MSL1/260
Hermeticity	Fine Leak, Gross Leak	MIL-STD-202, Method 112, Cond. C&D

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<b>Specification</b>	<b>Test/Inspection Condition</b>	<b>Reference/Spec</b>
Autoclave	15 psig, 100% RH, 121°C, 96 hours	JESD22 - Method A102