Non-Catalog Model

RF Transformer

Impedance Ratio: 16:1

T16-1T-KK81+
T16-1T-KK81

CASE STYLE: KK81

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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.

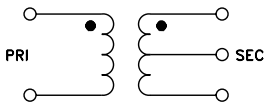
ELECTRICAL SPECIFICATIONS 50Ω @+25°C PIN=0 dBm					
Parameter		**Min.**	**Typ.**	**Max.**	**Units**
Frequency		0.3		120	MHz
Insertion Loss*	3dB bandwidth	0.3		120	MHz
	2dB bandwidth	0.7		80	MHz
	1dB bandwidth	5		20	MHz

*Referenced to midband loss .9dB typ.

MAXIMUM RATINGS	
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	250mW
DC Current	30mA

PIN CONNECTIONS	
PRIMARY DOT	4
PRIMARY	6
SECONDARY DOT	3
SECONDARY	1
SECONDARY CT	2
NOT USED	5

Configuration A



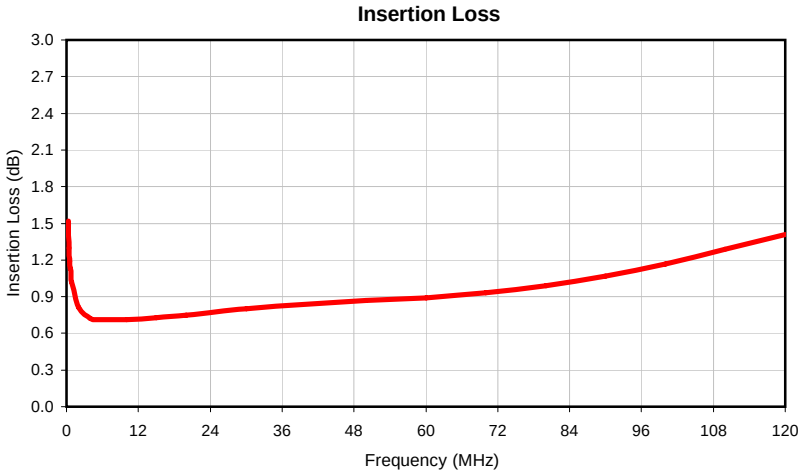
RF Transformer T16-1T

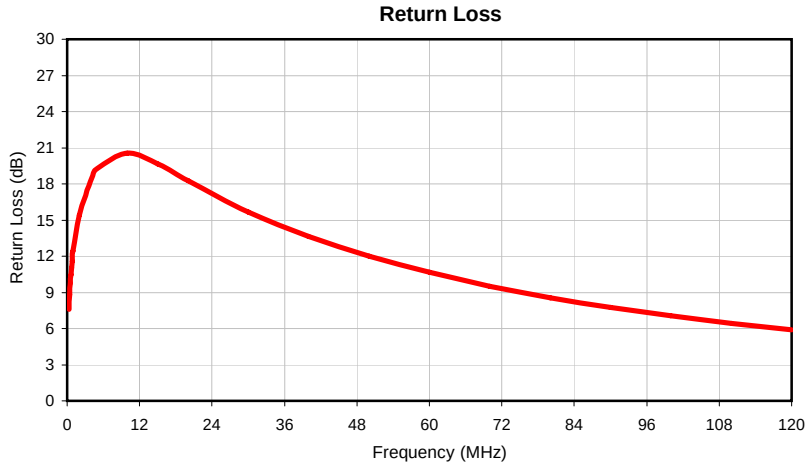
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)
0.30	1.52	7.57
0.40	1.30	8.82
0.50	1.19	9.76
0.60	1.13	10.47
0.70	1.09	11.06
0.80	1.05	11.57
0.90	1.02	12.03
1.00	1.00	12.43
2.00	0.81	15.38
4.00	0.72	18.43
5.00	0.71	19.30
10.00	0.71	20.53
15.00	0.73	19.63
20.00	0.75	18.25
30.00	0.80	15.67
40.00	0.84	13.62
50.00	0.87	11.99
60.00	0.89	10.66
70.00	0.93	9.53
80.00	0.99	8.57
90.00	1.07	7.76
100.00	1.17	7.04
110.00	1.29	6.44
120.00	1.41	5.90

RF Transformer T16-1T

Typical Performance Data

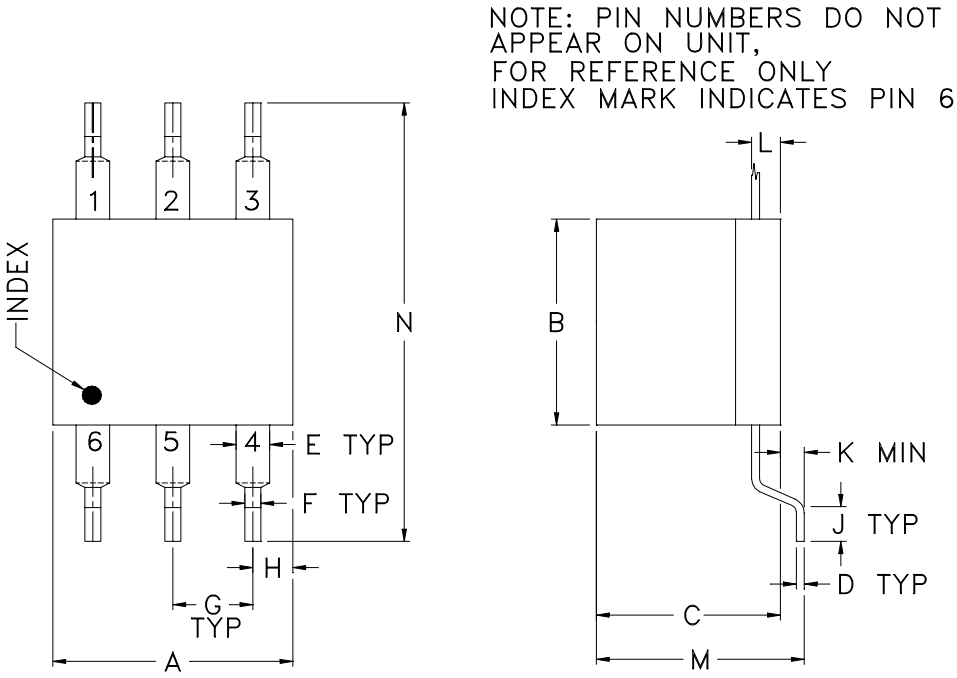




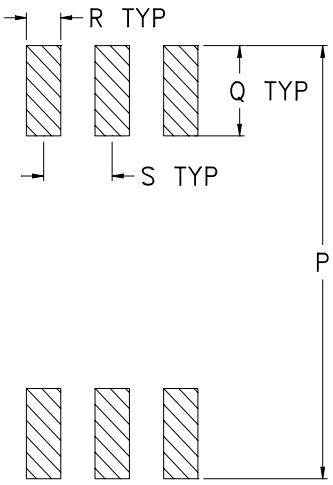
Case Style KK

KK81
KK265

Outline Dimensions



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

CASE #	A	B	C	D	E	F	G	H	J	K	L	M	N	P
KK81	.30 (7.62)	.27 (6.86)	.23 (5.84)	.010 (0.25)	0.42 (1.07)	.020 (0.51)	.100 (2.54)	.05 (1.27)	.05 (1.27)	.020 (0.51)	.036 (0.91)	.26 (6.60)	.575 (14.61)	.600 (15.24)
KK265	.30 (7.62)	.27 (6.86)	.22 (5.84)	.010 (0.25)	.020 (0.50)	.020 (0.51)	.100 (2.54)	.05 (1.27)	.05 (1.27)	0.1 (0.25)	.032 (0.81)	.23 (5.84)	.450 (10.62)	.475 (12.07)

CASE #	Q	R	S	WT. GRAM
KK81	.125 (3.18)	.050 (1.27)	.100 (2.54)	.50
KK265	.125 (3.18)	.050 (1.27)	.100 (2.54)	.65

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

Notes:

1. Case material: Plastic.
2. Termination finish:
   For RoHS Case Styles: Tin plate over Nickel plate.
   For RoHS-5 Case Styles: Tin-Lead plate.
3. Special Tolerances: Termination width ± .005 inch, termination thickness ± .003 inch.

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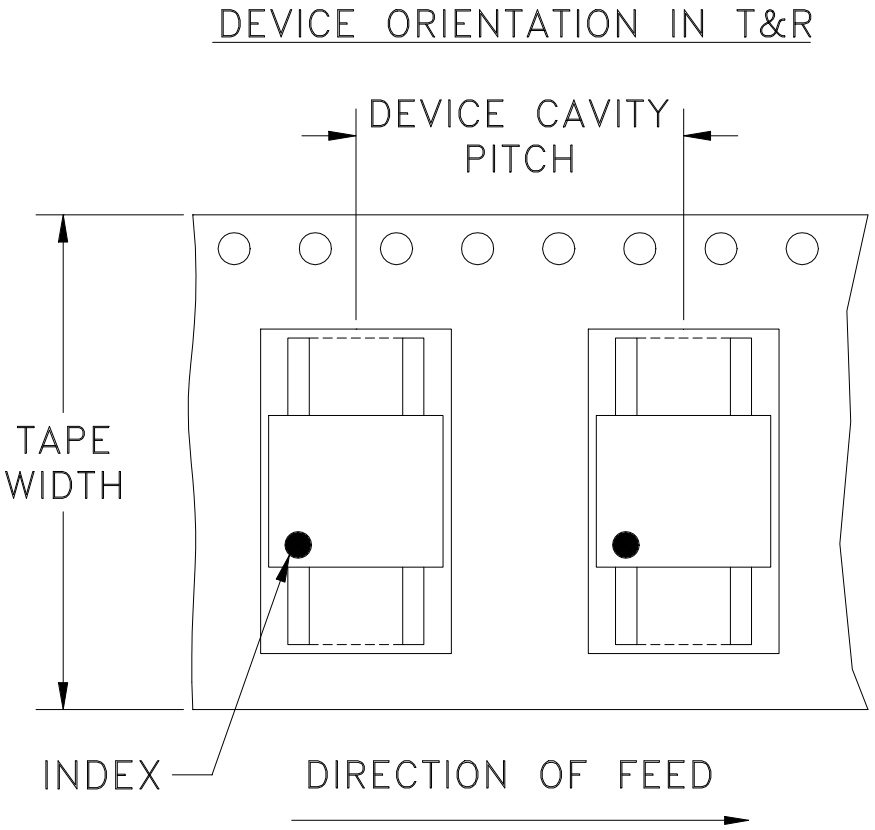
Tape & Reel Packaging TR-F1



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel
24	12	13	900

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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Environmental Specifications ENV19

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	-20° to 85°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-55° to 100°C, 100 cycles	MIL-STD-202, Method 107, Condition A-3, except +100°C
Solder Reflow Heat	Sn-Pb Eutetic Process: 225°C peak Pb-Free Process 245° - 250°C peak	J-STD-020, Table 4-1, 4-2 and 5-2, Figure 5-1
Solderability	10X Magnification	J-STD-002, Para 4.2.5, Test S, 95% Coverage
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition 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
Lead Integrity	2 Pound Pull, perpendicular to edge of unit	MIL-STD-202, Method 211, Condition A
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