

Engineering Development Model

RF Transformer

T9-ED10543/2

Impedance Ratio : 9

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 : KK81

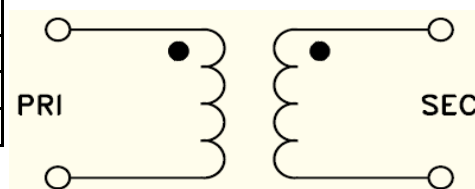
ELECTRICAL SPECIFICATIONS 50Ω @ +25°C				
Parameter		Min.	Typ.	Max. Units
Frequency		2.5		280 MHz
Insertion Loss *	3 dB Bandwidth		2.5 - 280	MHz
	2 dB Bandwidth		4.5 - 200	MHz
	1 dB Bandwidth		20 - 140	MHz

Notes:

* Insertion Loss is referenced to mid-band loss, 0.52dB typ.

MAXIMUM RATINGS	
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25 W
DC Current	30 mA

Configuration : C



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

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Typical Performance Data

FREQUENCY MHz	INSERTION LOSS (dB)	RETURN LOSS (dB)
1.75	3.15	4.25
2.00	2.73	4.91
2.50	2.11	6.26
3.00	1.69	7.49
3.50	1.40	8.64
4.00	1.21	9.71
4.50	1.07	10.68
5.00	0.97	11.57
6.00	0.87	13.08
7.00	0.81	14.31
8.00	0.77	15.31
9.00	0.75	16.15
10.00	0.73	16.87
20.00	0.61	21.31
40.00	0.53	24.68
60.00	0.52	23.32
80.00	0.53	20.82
100.00	0.56	18.63
108.00	0.58	17.83
116.00	0.59	17.07
118.00	0.60	16.88
120.00	0.60	16.71
130.00	0.63	15.84
140.00	0.67	15.05
145.00	0.69	14.67
150.00	0.71	14.31
155.00	0.74	13.96
160.00	0.77	13.60
200.00	1.01	11.18
240.00	1.41	9.20
280.00	1.96	7.59
320.00	2.72	6.29
360.00	3.77	5.27



P.O. Box 350186, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4861 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/MICROWAVE COMPONENTS

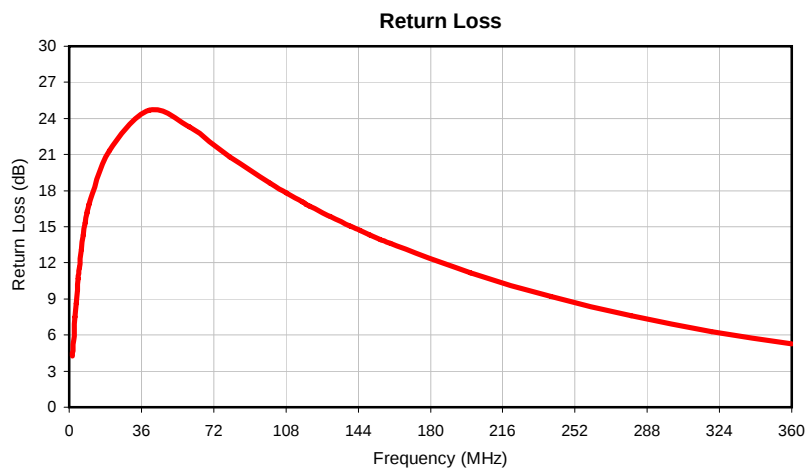
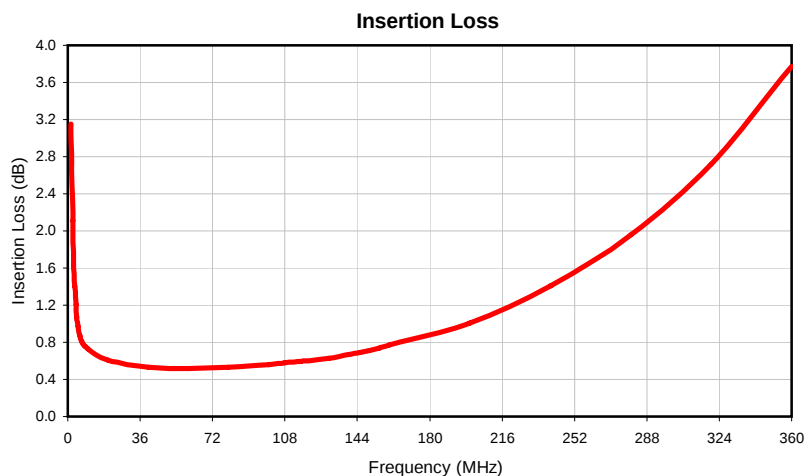


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Typical Performance Data



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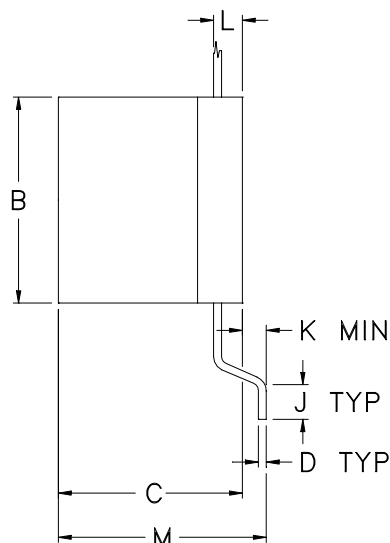
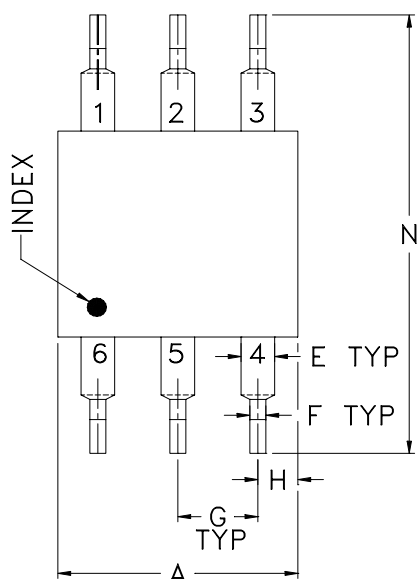


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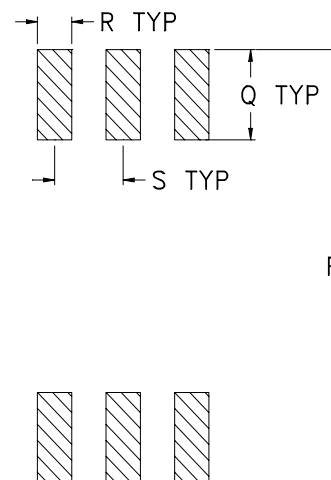
Outline Dimensions

KK81
KK265

NOTE: PIN NUMBERS DO NOT
APPEAR ON UNIT,
FOR REFERENCE ONLY
INDEX MARK INDICATES PIN 6.



PCB Land Pattern



Suggested Layout,
Tolerance to be within ± 0.002

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 (2.54)	.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. $\pm .03$; 3 Pl. $\pm .015$

Notes:

- Case material: Plastic.
- Termination finish:
For RoHS Case Styles: Tin plate over Nickel plate.
For RoHS-5 Case Styles: Tin-Lead plate.
- Special Tolerances: Termination width $\pm .005$ inch, termination thickness $\pm .003$ inch.



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Tape & Reel Packaging TR-F1

DEVICE ORIENTATION IN T&R



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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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