

Features

- wide bandwidth 10 to 4000 MHz
- balanced transmission line
- low insertion loss, 1.1 dB typ.
- excellent return loss
- aqueous washable

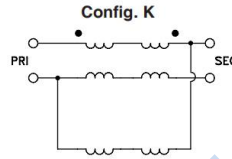
Applications

- PCS
- wideband push-pull amplifiers
- cellular

HT-TCM1-43X+



50Ω 10 to 4000 MHz



Electrical Specifications at 25°C

Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio	-	-	1	-	-
Frequency Range	-	10	-	4000	Mhz
Insertion Loss*	10-4000	-	1.1	3.0	dB
Amplitude Unbalance	10-4000	-	0.5	-	dB
Phase Unbalance†	10-4000	-	7	-	Degree

Typical Performance Data

(TEST CONDITIONS: INPUT POWER = 0dBm @ Temperature = +25°C)

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
10	1.09	18.38	0.04	0.42
100	1.02	20.93	0.03	0.91
500	1.04	19.48	0.12	3.57
1000	1.02	18.69	0.14	5.58
1500	1.01	18.63	0.07	6.61
2000	1.04	18.16	0.24	6.88
2500	1.11	17.10	0.48	6.85
3000	1.17	17.44	0.73	5.21
3500	1.33	17.30	0.82	3.05
4000	1.67	14.24	0.97	1.66

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	0.4W
DC Current	30mA

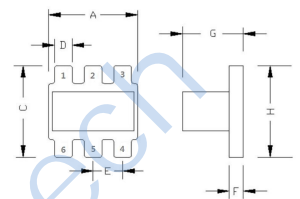
*Permanent damage may occur if any of these limits are exceeded.

Pad Connections

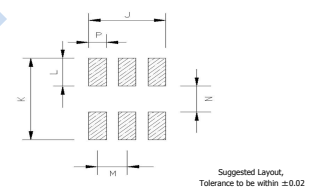
PRIMARY DOT	3
PRIMARY	1,2
SECONDARY DOT	6
SECONDARY	4
GND	1,2
NOT USED	5

*Pin 1 and 2 must be connected together to form Config. K. We recommend grounding this side of the primary as shown in PL-364.

Outline Drawing



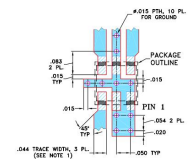
PCB Land Pattern



Outline Dimensions: Unit (mm)

A	3.81	C	3.81	D	0.76
E	1.27	F	0.61	G	2.61
H	3.81	J	3.30	K	4.83
L	1.65	N	1.53	M	1.27
WT			0.15g	P	0.76

Suggested PCB Layout



NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4030B WITH DIELECTRIC THICKNESS 35µm ± 0.5µm. COPPER 1/2 OZ. ON EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
3. DENOTES PCB COPPER LAYOUT WITH SOLDER COOLER MADE OVER BASE COPPER.
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

