SURFACE MOUNT

RF Transformer

TC2-1TG2-11+

50Ω 3 to 300 MHz

FEATURES

- Suitable for tin/lead and RoHS solder systems
- Excellent amplitude unbalance, 0.5 dB typ. and phase unbalance, 4 deg. typ. in 1 dB bandwidth
- Aqueous washable



Generic photo used for illustration purposes only

CASE STYLE: AT224-3

+RoHS Compliant
The +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

APPLICATIONS

- Impedance matching
- Balanced antennas
- Push-pull amplifiers

Qorvo Part No	Description
QPB2318	5-210 MHz 15.5 dB DOCSIS 3.1 Reverse Amplifier
QPB2328	5-210 MHz 17.8 dB DOCSIS 3.1 Reverse Amplifier

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio			2		
Frequency Range		5		300	MHz
Insertion Loss*	3-300		1.0		dB
Phase Unbalance	3-300		4		Deg.
Amplitude Unbalance	3-300		0.5		dB

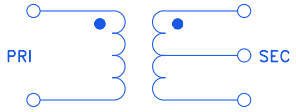
*Insertion Loss is referenced to mid-band loss, 0.4 dB typ.

MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.30W
DC Current	30 mA
Idc Center Tap	300 mA Max.

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

CONFIG. A



REV. B
ECO-022233
TC2-1TG2-11+
MCL NY
240513

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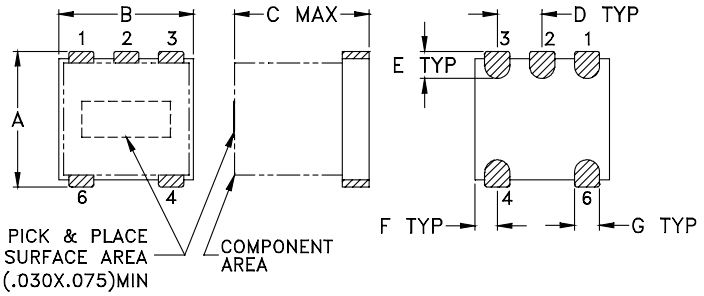
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PIN CONNECTIONS

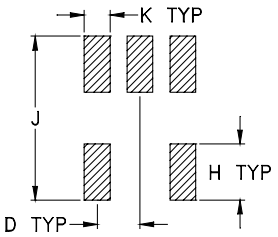
Function	Pin Number
PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	1
SECONDARY	3
SECONDARY CT	2

PRODUCT MARKING: N/A

OUTLINE DRAWING



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

OUTLINE DIMENSIONS (inch / mm)

A	B	C	D	E	F
.150	.150	.150	.050	.030	.025
3.81	3.81	3.81	1.27	0.76	0.64

G	H	J	K		wt
.028	.065	.190	.030		grams
0.71	1.65	4.83	0.76		0.10

TAPE & REEL INFORMATION: F17

SURFACE MOUNT

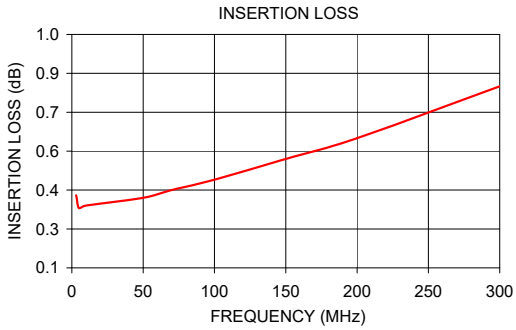
RF Transformer

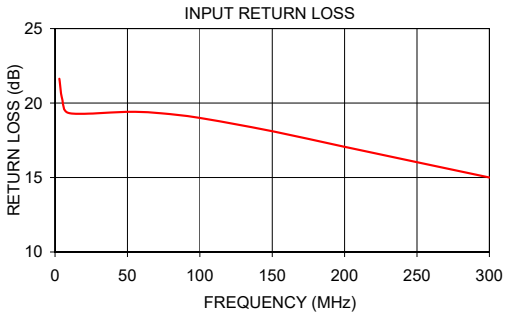
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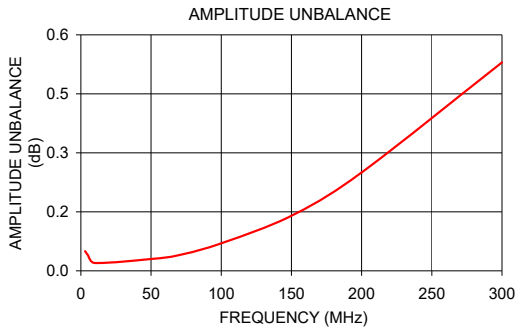
50Ω 3 to 300 MHz

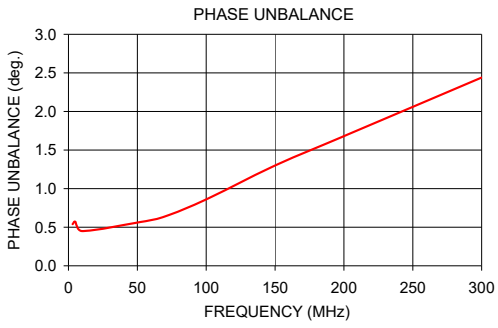
TYPICAL PERFORMANCE DATA

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
3.00	0.38	21.63	0.05	0.54
5.00	0.33	20.24	0.04	0.57
10.00	0.34	19.32	0.02	0.45
50.00	0.37	19.41	0.03	0.56
70.00	0.40	19.34	0.04	0.64
100.00	0.44	19.00	0.07	0.86
150.00	0.52	18.11	0.14	1.30
200.00	0.60	17.06	0.25	1.68
300.00	0.80	15.00	0.53	2.44









NOTES

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

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