Surface Mount

RF Transformer

TRS2-1T-13-2+

50Ω 10 to 2200 MHz

CASE STYLE: AT577
PRICE: contact sales department

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC Current	30mA

Pin Connections

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

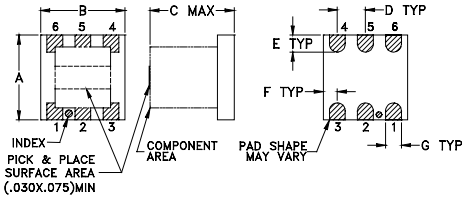
Features

- wideband, 10 to 2200 MHz
- small size
- aqueous washable

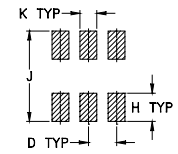
Applications

- VHF/UHF
- receivers/transmitters
- impedance matching

Outline Drawing



PCB Land Pattern



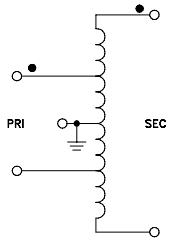
Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch / mm)

A	B	C	D	E	F
.200	.200	.200	.075	.050	.025
5.08	5.08	5.08	1.91	1.27	0.64

G	H	J	K		wt
.026	.070	.220	.035		grams
0.66	1.78	5.59	0.89		0.15

Config. L



Transformer Electrical Specifications

Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
2	10-2200	—	10-2200	50-1000

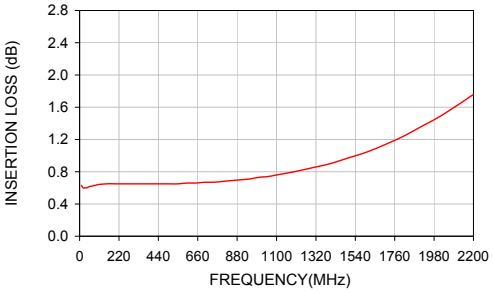
* Insertion Loss is referenced to mid-band loss, 0.60 dB typ.

NON-CATALOG

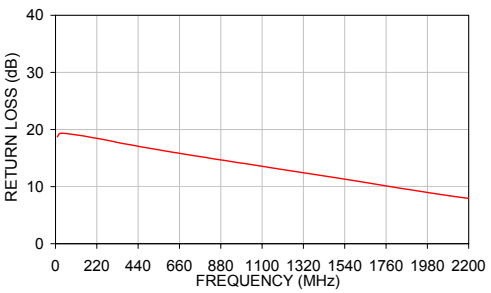
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
10.00	0.63	18.73
50.00	0.61	19.31
100.00	0.64	19.10
300.00	0.65	17.95
500.00	0.65	16.72
800.00	0.68	15.11
1000.00	0.73	14.08
1500.00	0.97	11.51
2000.00	1.47	8.88
2200.00	1.76	7.94

TRS2-1T-13-2+
INSERTION LOSS



TRS2-1T-13-2+
RETURN LOSS



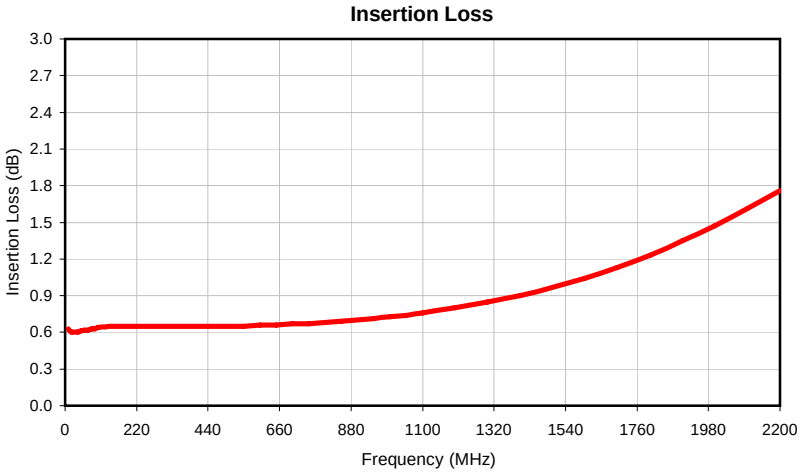
RF Transformer TRS2-1T-13-2+

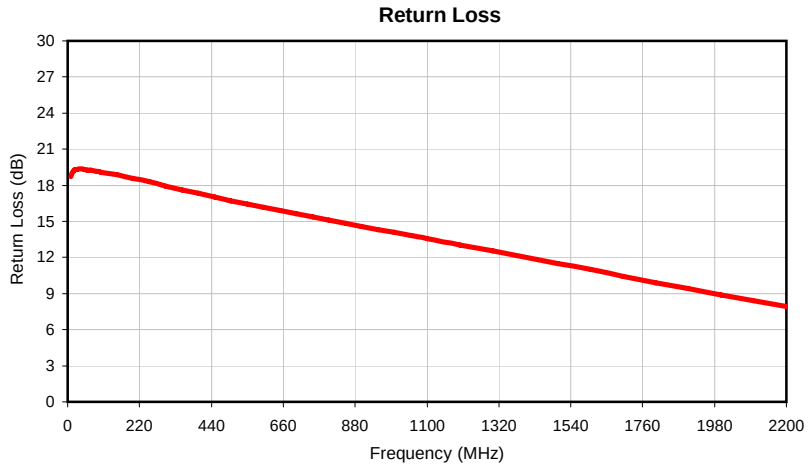
Typical Performance Data

FREQUENCY MHz	INSERTION LOSS (dB)	RETURN LOSS (dB)
10.00	0.63	18.73
20.00	0.60	19.25
30.00	0.60	19.33
40.00	0.60	19.35
50.00	0.61	19.31
60.00	0.62	19.28
70.00	0.62	19.23
80.00	0.63	19.19
90.00	0.63	19.15
100.00	0.64	19.10
150.00	0.65	18.87
200.00	0.65	18.57
250.00	0.65	18.29
300.00	0.65	17.95
350.00	0.65	17.60
400.00	0.65	17.32
450.00	0.65	17.00
500.00	0.65	16.72
550.00	0.65	16.45
600.00	0.66	16.16
650.00	0.66	15.89
700.00	0.67	15.62
750.00	0.67	15.35
800.00	0.68	15.11
850.00	0.69	14.82
900.00	0.70	14.59
950.00	0.71	14.31
1000.00	0.73	14.08
1050.00	0.74	13.82
1100.00	0.76	13.56
1200.00	0.80	13.04
1300.00	0.85	12.53
1400.00	0.90	12.03
1500.00	0.97	11.51
1600.00	1.04	10.99
1700.00	1.13	10.45
1800.00	1.23	9.91
1900.00	1.35	9.39
2000.00	1.47	8.88
2100.00	1.61	8.39
2200.00	1.76	7.94

RF Transformer TRS2-1T-13-2+

Typical Performance Data

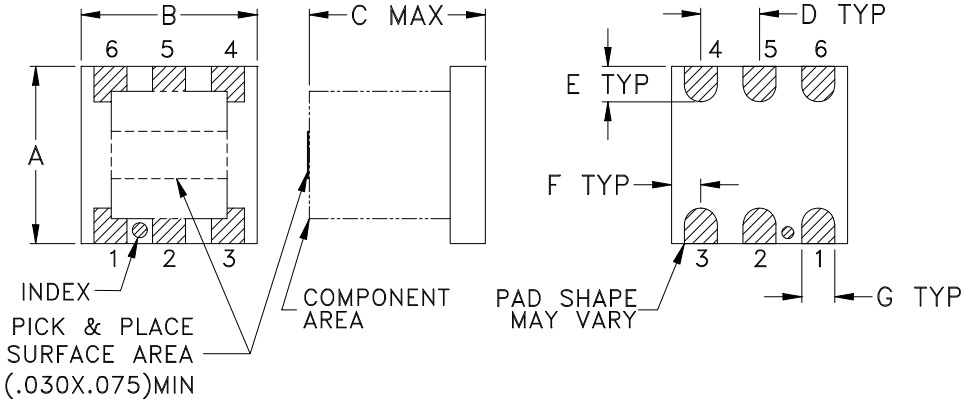




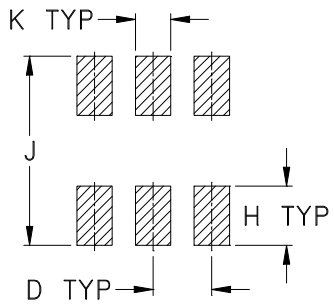
Case Style AT

Outline Dimensions

AT577



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

CASE #	A	B	C	D	E	F	G	H	J	K	L	WT. GRAMS
AT577	.200 (5.08)	.200 (5.08)	.200 (5.08)	.075 (1.91)	.050 (1.27)	.025 (0.64)	.026 (0.66)	.070 (1.78)	.220 (5.59)	.035 (0.89)	-- --	.15

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

Notes:

1. Open style, ceramic base.
2. Termination finish:
   For RoHS Case Style: 2-10 µ inch (.05-.25 microns) Gold over 100-300 µ inch (2.54-7.62 microns) Nickel plate.
   For RoHS-5 Case Style: Tin-Lead plate

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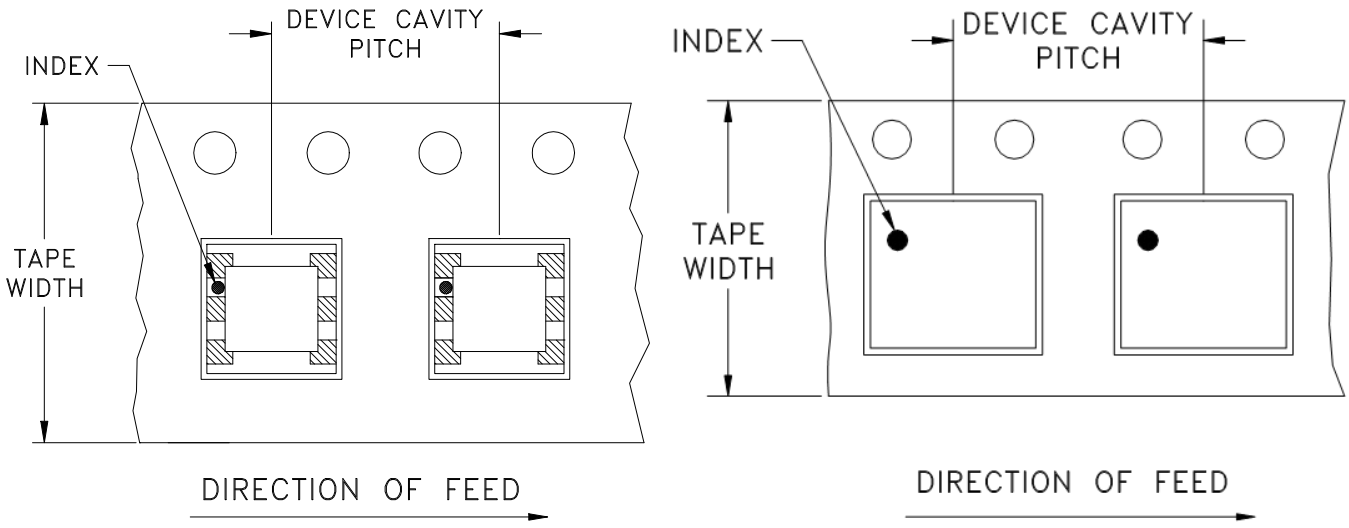
Tape & Reel Packaging TR-F73

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel	
12	8	7	Small quantity standards (see note)	20
				50
				100
				200
				500
		13	Standard	1000
				2000

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

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