0.3 to 475 MHz

TC9-1-75X+



Generic photo used for illustration purposes only

#### CASE STYLE: AT1521

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



# Features

 $75\Omega$ 

- wideband 0.3-475 MHz
- good return loss, 23 dB typ in 1 dB bandwidth
- step-down 9:1 autotransformer
- plastic base with leads
- · aqueous washable

#### **Applications**

· matching laser diode

# Electrical Specifications at 25°C

Parameter	Condition	Min.	Тур.	Max.	Unit
Impedance Ratio (secondary / primary)			75/8		Ohm
Frequency Range		0.3		475	MHz
	0.3-475		3.0		
Insertion Loss*	0.5-450		2.0		dB
	0.9-370		1.0		

<sup>\*</sup> Insertion Loss is referenced to mid-band loss, 0.4 dB typ. Stepdown, 75 ohm primary, 51 pF across secondary

### **Maximum Ratings**

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

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

#### **Pin Connections**

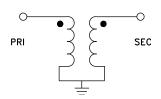
Function	Pin Number
PRIMARY DOT	6
PRIMARY	3
SECONDARY DOT	1
SECONDARY	3

#### **Product Marking**

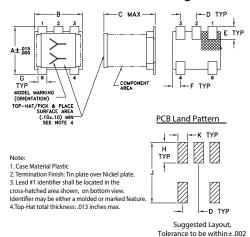


Demo Board MCL P/N: TB-276

# Config. D



# **Outline Drawing**

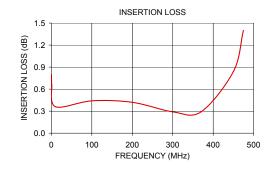


#### Outline Dimensions (inch )

F	Е	D	С	В	Α
.025	.040	.050	.160	.150	.150
0.64	1.02	1.27	4.06	3.81	3.81
wt		K	J	Н	G
grams		.030	.190	.065	.028
n 15		0.76	1 83	1 65	0.71

### **Typical Performance Data**

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	
0.30	0.80	14.70	
0.50	0.71	16.80	
0.90	0.66	18.13	
10.00	0.36	22.63	
100.00	0.44	22.86	
200.00	0.42	22.40	
300.00	0.29	23.48	
370.00	0.29	18.53	
450.00	0.84	9.48	
475.00	1.40	7.44	





#### **Additional 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/MCLStore/terms.jsp

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Mini-Circuits: