

## **DESCRIPTION**

The TOKO DIP1A Series of wirewound diplexers contain an integrated coaxial F-connector and are specifically designed for DOCSIS 2.0 broadband communication platforms including cable modems, digital set-top boxes, and residential gateways. Ideal for digital silicon tuner applications, TOKO's RF filter design expertise provides for excellent insertion loss and rejection performance in an economical, fully shielded, and durable structure.



## **FEATURES**

TOKO Product Type: DIP1AFully Shielded Structure

■ Integrated F-connector

■ 75Ω Ports

■ DOCSIS 1.0/1.1/2.0 Compliant

■ Surge Protection Circuit

Bellcore 1089, Surge 1 First Level

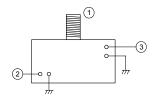
■ Operating Temperature: 0°C to + 70°C

■ Storage Temperature: - 40°C to + 70°C

■ Humidity: 30 to 85% RH (w/out condensation)

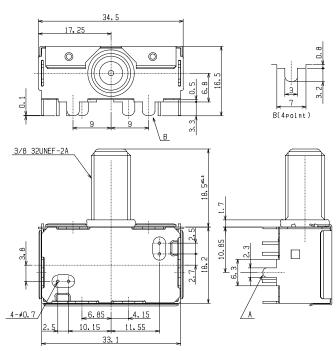
Detailed specifications available upon request.

## **CONNECTIONS (BOTTOM VIEW)**



- 1. F-connector  $(75\Omega)$
- 2. Downstream (HPF)  $(75\Omega)$
- 3. Upstream (LPF)  $(75\Omega)$

## **DIMENSIONS**



Tolerance: ±0.3mm

Units: mm

## **ELECTRICAL SPECIFICATIONS**

TOKO Part Number	Region of Application	Low Pass Filter Passband (MHz)	High Pass Filter Passband (MHz)	Impedance (Ω)	Detailed Specifications
R975ACITN-1029B	North America	5~42	88~860	75	Note 1
R975ACJVN-1041	Europe, China	5~65	108~860	75	Note 1
R975ACITN-1036B	Japan	10~55	90~770	75	Note 1

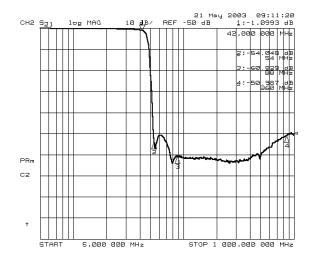
Note 1: Detailed specifications to qualified customers available upon request. Contact TOKO America for details http://www.tokoam.com/.



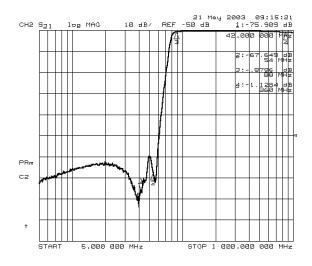
## **TYPICAL CHARACTERISTICS**

## R975ACITN-1029B (North America)

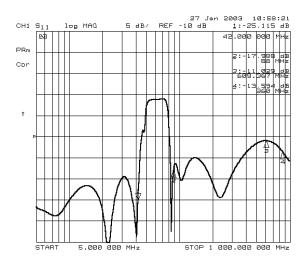
#### Attenuation and Insertion Loss (TX to Cable, $75\Omega$ )



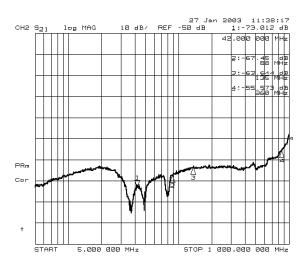
#### Attenuation and Insertion Loss (Cable to RX, 75Ω)



## **Coaxial Port Return Loss**



### **RX-TX** Isolation

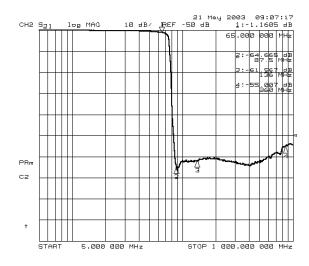




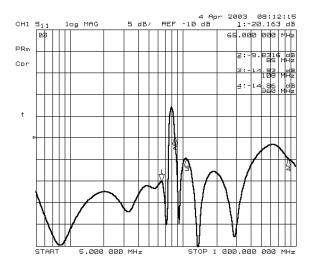
## **TYPICAL CHARACTERISTICS**

## R975ACJVN-1041 (Europe, China)

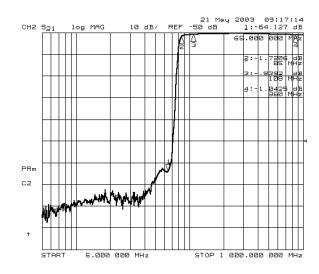
#### Attenuation and Insertion Loss (TX to Cable, $75\Omega$ )



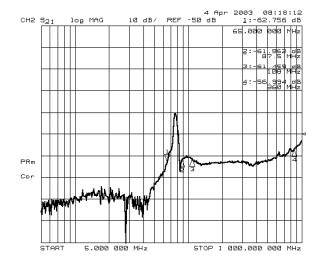
### **Coaxial Port Return Loss**



#### Attenuation and Insertion Loss (Cable to RX, 75Ω)



### **RX-TX** Isolation

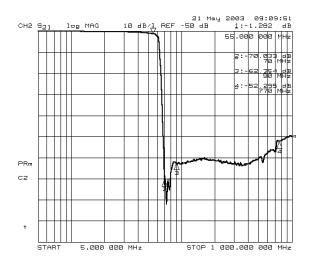




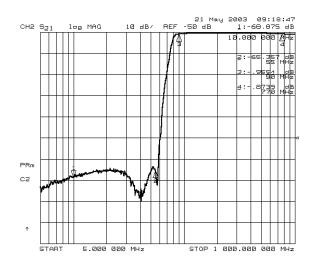
## **TYPICAL CHARACTERISTICS**

## R975ACITN-1036B (Japan)

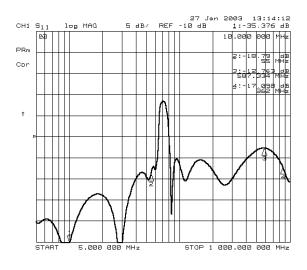
### Attenuation and Insertion Loss (TX to Cable, $75\Omega$ )



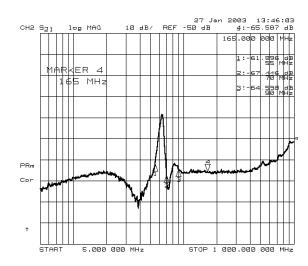
#### Attenuation and Insertion Loss (Cable to RX, 75Ω)



## **Coaxial Port Return Loss**



## **RX-TX** Isolation



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