

# **GPS DIELECTRIC PATCH ANTENNA**

# **Description**

The TOKO #DAKC1575MS74T is a low profile, dielectric antenna element specifically designed for 1575.42 MHz L1 GPS applications. The flat patch antenna incorporates a rectanglar micro-strip design for GPS C/A right-hand circular polarization wave reception. The #DAKC1575MS74T has excellent stability and sensitivity through the use of high performance ceramic materials well suited for GPS applications and ships with double-sided adhesive tape for ease in mounting to the ground plane.



#### **Features**

• Range of Receiving Freq: 1575.42±1.023 MHz

• Center Frequency: 1580.5 MHz with 70mm<sup>2</sup> GND plane<sup>1</sup>

• Bandwidth: 9 MHz min. (Return Loss ≤ -10 dB)

• Miniature footprint: 25mm x 25mm

• Low Profile: 4.5mm

• Gain (Zenith 90°): +5 dBi (typ.) • Gain (10° Elevation): -1 dBi (typ.)

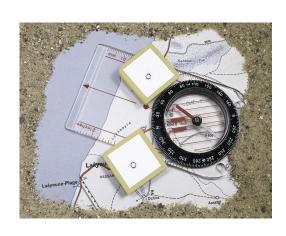
• Impedance:  $50 \Omega$ 

• Freq. Temperature Coefficient: 0±20ppm/°C max.

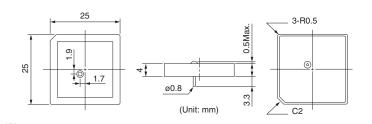
• Operation Temperature: - 40°C to +105°C

• Storage Temperature: - 40°C to +105°C

• Lead-free terminated electrode (Part No. #DAKC1575MS74T)

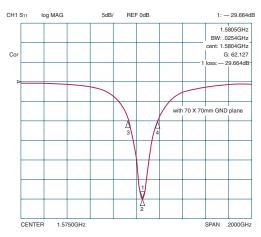


# **Dimensions**

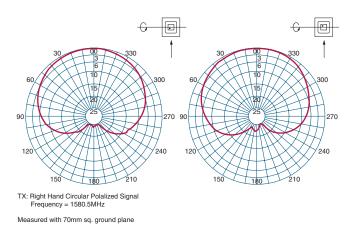


# Typical Characteristics

# Return Loss



# **Directivity Charts**



NOTE 1: Center frequency is shifted approximately 5MHz down when covered with radome.

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#### TOKO America, Inc.

1250 Feehanville Drive, Mount Prospect, Illinois 60056

Tel: (847) 297-0070 Fax: (847) 699-7864 Web: http://www.tokoam.com