

## GPS DIELECTRIC PATCH ANTENNA

## **DESCRIPTION**

The TOKO DAK1575MS50T is a low profile, dielectric antenna element specifically designed for 1575.42 MHz L1 GPS applications. The flat patch antenna incorporates a rectangular micro-strip design for GPS C/A right-hand circular polarization wave reception. The DAK1575MS50T 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 Freq.: 1580.5 MHz with 70mm<sup>2</sup> GND plane<sup>1</sup>

■ Bandwidth: 9 MHz min.

■ Miniature Footprint: 25mm x 25mm

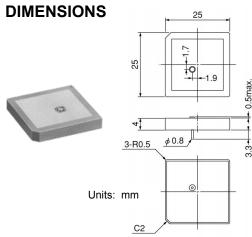
■ Low Profile: 4.5mm

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

■ Impedance:  $50 \Omega$ 

Freq. Temperature Coefficient: 20ppm/°C max.
 Operating Temperature: -40°C to +105°C
 Storage Temperature: -40°C to +105°C



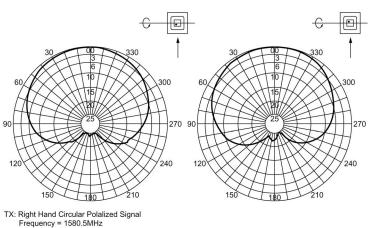


## TYPICAL CHARACTERISTICS

#### **Return Loss**

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### **Directivity Charts**



Measured with 70mm sq. ground plane

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

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#### TOKO America, Inc.

1250 Feehanville Drive, Mt. Prospect, IL 60056

Tel: 800-PIK-TOKO or 847-297-0070 Fax: 847-699-7864 Web: http:// www.tokoam.com