

## DAX, DAK Series

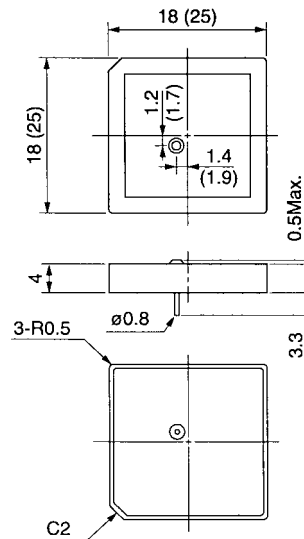
Toko's DAX and DAK Series are miniature dielectric antenna elements for Global Positioning Systems (GPS). These patch antenna elements have excellent stability and sensitivity through the use of high performance proprietary ceramic materials well suited for GPS frequencies.



DAX Series



DAK Series



( ): DAK series  
(Unit: mm)

## Antenna Structure

- Type: Flat patch
- Design Method: Rectangular micro-strip antenna (MSA)
- Uses: For Global Positioning Systems (GPS) C/A right hand circular polarization wave reception
- Feeding Method: Off-set one point feeding through ground plane

## Features

- Provides highly stabilized performance under various application environments with the use of a dielectric ceramic which has a low temperature coefficient.
- Antenna electrode is silver with good high frequency characteristics.

## SPECIFICATIONS

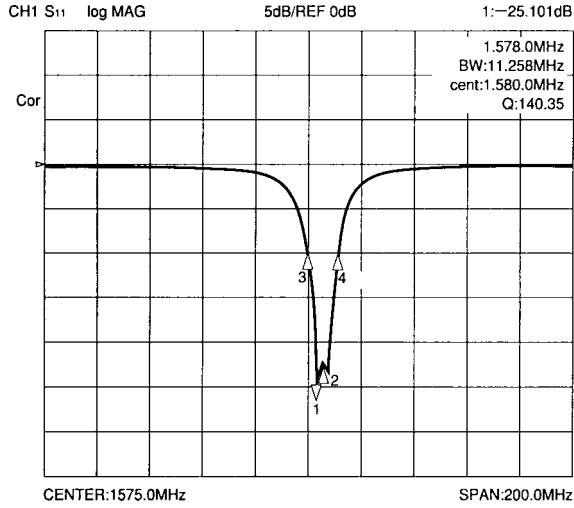
### TYPE DAX, DAK

TOKO Part Number	DAX1575MS63	DAK1575MS50
Range of Receiving Frequency	1575.42MHz $\pm$ 1.023MHz	1575.42MHz $\pm$ 1.023MHz
Center Frequency	1580.5MHz with 40mm Square GND Plane *1	1580.5MHz with 70mm Square GND Plane *1
Band Width	6MHz min.	9MHz min.
Gain (Zenith 90°)	0dBi typ.	+5dBi typ.
Gain (10° Elevation)	—	-1dBi typ.
Impedance	50 $\Omega$	50 $\Omega$
Frequency Temperature Coefficient	20ppm/deg. °C max.	20ppm/deg. °C max.

\*1. Center frequency is shifted 5MHz down when covered with a radome.

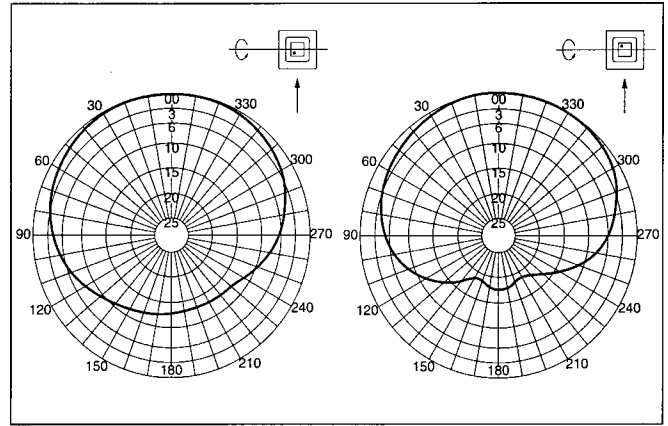
**DAX Series**

**Return loss Characteristics**



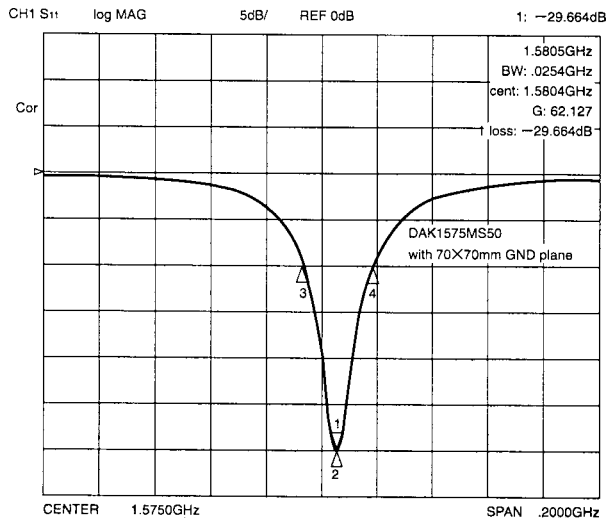
Note: Fixing the Antenna  
Use of a both side adhesive tape on the grounding plate is recommended.  
On order, it is possible for TOKO to attach such tape before shipment.

**Directivity chart**



**DAK Series**

**Return loss Characteristics**



Note: Fixing the Antenna  
Use of a both side adhesive tape on the grounding plate is recommended.  
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**Directivity chart**

