REV	REF.	DESCRIPTION	INPT BY	APP	DATE
1		Prototype Release	CAC	SLH	10/11/99
A	1828	Release	CDC		11/30/99

# **ITRONIX**

## **NOTICE OF PROPRIETARY INFORMATION**

Information contained herein is proprietary and is the property of Itronix, Corporation. Where furnished with a proposal, the recipient shall use it solely to evaluate the proposal. Where furnished to a customer, it shall be used solely for purposes of inspection, installation, or maintenance. Where furnished to a supplier, it shall be used solely in the performance of work contracted by this company. The information shall not be used or disclosed by the recipient for any other purpose whatsoever.

APPROVALS		Unless otherwise specified dimensions are in inches. NOT TO SCALE DRAWING		ITRONIX CORPORATION S 801 STEVENS AVE. P.O. BOX 0179 SPOKANE, WA 99210-0179	
ORIG. D. McLean	DATE 10/8/99			TITLE:	
СНК.	DATE			VEHICLE ANTENNA, MOBITEX, UNITY GAIN,	
ENG.	DATE			Z563, GROUND PLANE DEPENDENT	
MFG.	DATE			Drawing Number 46-0060-000	
F.S.	DATE			PAGE 1 OF 4	

## **CHANGE RECORD**

REV	SECTION	CHANGE DESCRIPTION	DATE
1	All	Prototype Release	10/11/99
A	All	Release	

1.0 **DESCRIPTION**: Unity gain, ground plane vehicle antenna. The factory tuned frequency is 898 MHz. This antenna is for use in a Mobitex network.

#### 2.0 APPLICABLE DOCUMENTS AND REFERENCES:

- 2.1 ITRONIX DOCUMENTS:
  - Procedure, Reliability Design Guidelines....920-0806-001
- 2.2 MANUFACTURER'S SPECIFICATION: MaxRad Z563

### 3.0 MECHANICAL REQUIREMENTS:

- 3.1 Dimensions (For Reference Only): See Figure 1.
- 3.2 Radiator Material: Stainless steel with a bright finish.
- 3.3 Antenna Length (For Reference Only): 3 inches
- 3.4 Rod/Coil Type: Straight
- 3.5 Connectors:  $1^{-1}/_{8}$ "-18 mounting threads mate with  $\frac{3}{4}$ " mounts (with a rubber gasket)
- 3.6 Mounting (For Reference Only): 3/4" Magnetic Mount (46-0065-xxx) **OR** Thru-hole Mount (46-0073-xxx).

#### 4.0 **ELECTRICAL REQUIREMENTS**:

- 4.1 VSWR at Resonant Point: <1.5:1
- 4.2 Nominal Impedance:  $50\Omega$
- 4.3 Antenna Type: <sup>1</sup>/<sub>4</sub> wave
- 4.4 Operating Frequency Range: 896-941
- 4.5 Factory Tuned Frequency: 898 MHz
- 4.6 Intended for Use in Network Type: Mobitex
- 4.7 Power Dissipation: 100 W

#### 5.0 ENVIRONMENTAL REQUIREMENTS:

- 5.1 Temperature:  $-40^{\circ}$ C to  $+85^{\circ}$ C
- 5.2 Humidity: 0% to 100% Relative Humidity
- 6.0 **SAFETY REQUIREMENTS**: N/A

#### 7.0 **MARKING REQUIREMENTS**:

The bulk shipping container must bear the Manufacturer's name and part number.

#### 8.0 **PACKAGING REQUIREMENTS**:

Packaging of components shall be such that no damage will occur to the component during shipment. Refer to EIA STD RS-383-A.

#### 9.0 **ACCEPTABILITY REQUIREMENTS**:

These units must meet inspection requirements. The antenna bag should contain an antenna rod, a nut, a rubber gasket (MaxRad part number MSGSK), a rain cap and assembly instructions.

## 10.0 MANUFACTURER AND MANUFACTURER'S PART NUMBER:

See Section 9.0 for a list of parts included.

Part Number	Manufacturer	Manufacturer's Part Number
46-0060-001	MaxRad	Z563

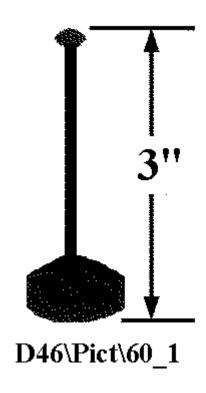


Figure 1: 46-0060-001 Antenna dimensions (For Reference Only)