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

# **ITRONIX**

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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, 5 dB, Z573
ENG.	DATE			ELEVATED FEED
MFG.	DATE			Drawing Number 46-0062-000
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**: Five dB gain, elevated 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 Z573

#### 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): 31-1/2inches
- 3.4 Rod/Coil Type: Trillinear/Open
- 3.5 Connectors:  $1^{-1}/_{8}$ "-18 mounting threads mate with 3/4" mounts (with a rubber gasket)
- 3.6 Mounting (For Reference Only): ¾ Magnetic Mount (46-0065-xxx), Thru-Hole Mount (46-0073-xxx) **OR** ¾ Chrome Frame Mount (46-0074-xxx)

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

- 4.1 VSWR at Resonant Point: <1.5:1
- 4.2 Nominal Impedance:  $50\Omega$
- 4.3 Antenna Type: Dual ½wave over a ¼ wave
- 4.4 Operating Frequency Range: 896-940 MHz
- 4.5 Factory Tuned Frequency: 898 MHz
- 4.6 Intended for Use in Network Type: Mobitex
- 4.7 Power Dissipation: 125 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 elevated feed base, a rod, a rubber gasket (MaxRad part number MSGSK), a rain cap, an allen wrench 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
46-0062-001	MaxRad	Z573

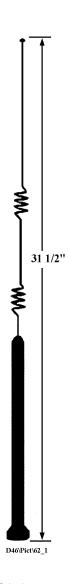


Figure 1: 46-0062-001 Antenna dimensions (For Reference Only)