



Florencio Ceballos

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Infotainment Subsystems*

May 23, 2005

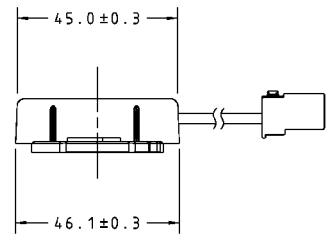
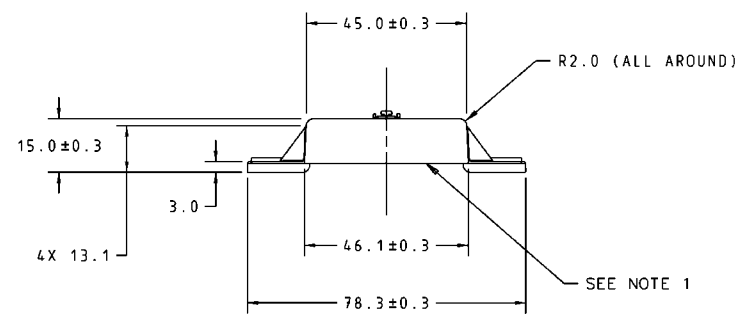
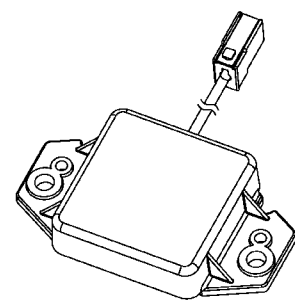
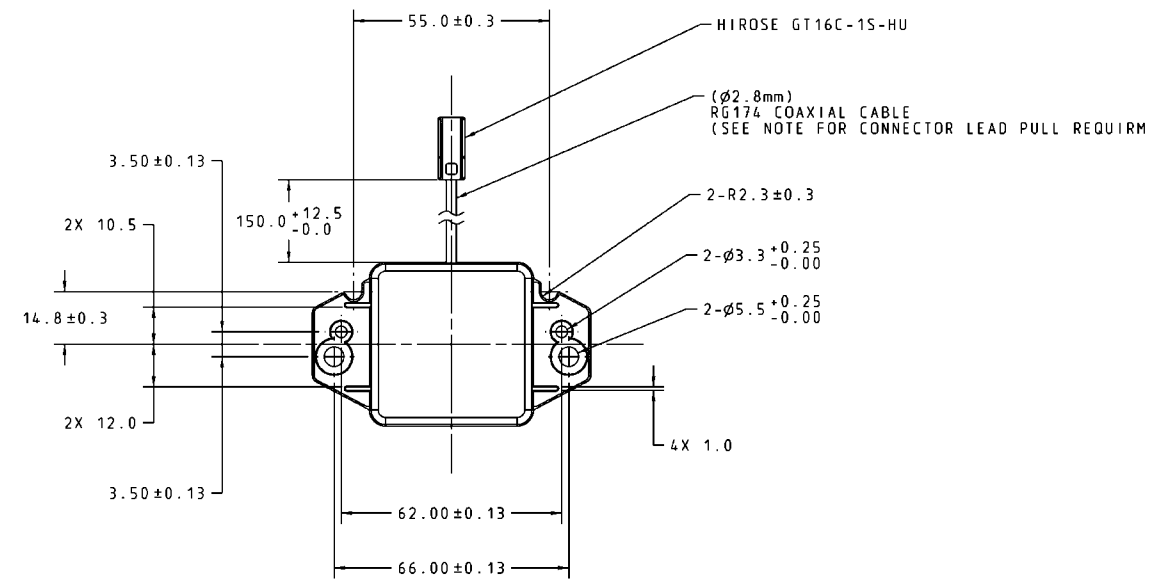
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Visteon Bluetooth Antenna Information

Antenna Type: RHCP Rectangular Patch
Part Number: VP5ASF-19C037-AA
Max Gain: 4dBic

FC

End of Document



Bluetooth Antenna:
Antenna Assembly, frequency of use 2400 MHz to 2485 MHz, Bluetooth band.

Coaxial cable:
Coaxial cable length 150 mm +12.5mm, -0 mm.
Cable type RG174 (such as Judd Wire Inc. Specification C1601037)
Cable Characteristic Impedance 50 Ohm +/- 10% at 2400 MHz
Cable Capacitance 106 pF/m +/- 5%
Cable attenuation max attenuation at 2500 MHz 1.8 dB/m, + 0.1dB/m.

Antenna sensing resistor:
Antenna dc shunt resistance measured at the GT16C coaxial connector to be 10 kilo Ohm, +/- 5%, nominally 0.250 Watts
Max applied continuous dc test voltage 35 Volts, +/- 5%.

Antenna Gain:
The antenna gain measured on a 300 mm flat test ground plane shall be better than 0dBic.

Antenna beamwidth:
The antenna 6 dB beamwidth, exclusive of ripple up to 1dB shall, shall be 110 degrees when measured on a 300 mm square test ground plane.

Voltage Standing Wave (VSWR):
The antenna VSWR of 2:1 (Return loss 9.5 dB) shall include the Bluetooth band and should exceed 102 MHz, i.e. 1.2 x the Bluetooth bandwidth.

RF power handling:
The antenna assembly power handling to be 1 Watt based on 50% duty cycle.

Antenna polarization:
The antenna will exhibit Right Hand Circular polarization. (IEEE definition).

Antenna boresight:
The electrical boresight shall be within 30 degrees of zenith, where the zenith is along a line projected normal to the upper face of the antenna patch. Verification of boresight to be performed on a test ground plane by measuring the antenna pattern in two orthogonal planes through the zenith and demonstrating the peak of both cuts lies within 30 degrees of the zenith.

Test ground plane:
The test ground plane will be a flat plane conductive metal sheet 300 x 300 mm, +/- 32 mm (lambda/4) to permit tuning as required.

Weight:
The antenna assembly, including cable and connector, will not exceed 40 grams.

- >GA1 UNLESS OTHERWISE SPECIFIED
THE LETTER/NUMBER CODE PRECEDING ANY NOTE IS FOR CAD NOTE IDENTIFICATION AND RETRIEVAL
 - >GE3 ENGINEERING APPROVAL OF PRODUCTION SAMPLES FROM EACH SUPPLIER IS REQUIRED PRIOR TO AUTHORIZATION OF INITIAL PRODUCTION
 - >GE4 ENGINEERING APPROVAL MUST BE OBTAINED BEFORE ANY CHANGE IN MATERIAL - CONSTRUCTION - OR PROCESSING CAN BE MADE
 - >GM2 MATERIAL CONTROL FOR BLACK / GREY BOX ITEM PER WSS-M99P23-B
- CONNECTOR/CABLE SHALL BE ABLE TO WITHSTAND 10KGF (98.1 N) PULL FORCE APPLIED ON CONNECTOR FOR ONE MINUTE.
- THE MODULE SHALL BE ABLE TO PASS VISTEON PV/DV TESTS WITH NISSAN MVL BLUETOOTH RECEIVER MODULE.
- THE MODULE SHALL COMPLY WITH DROP REQUIREMENTS SPECIFIED BELOW:
- PACKAGE DROP:**
WITH THE COMPONENT IN ITS PROTECTIVE SHIPPING PACKAGE DROP THE PACKAGE A DISTANCE OF 100 CM ONTO A CONCRETE OR STEEL SURFACE. REPEAT ONCE FOR EACH PACKAGE SURFACE AND CORNER.
- HANDLING DROP:**
DROP THE COMPONENT A DISTANCE OF 76 CM ONTO A CONCRETE OR STEEL SURFACE. REPEAT ONCE FOR EACH COMPONENT SURFACE AND CORNER.
- NOTE 1** APPLY PRODUCTION LABEL AS SHOWN. LABEL PRINT SHALL BE BLACK PERMANENT INK AND DISTINGUISHABLE AGAINST ALL BACKGROUND COLORS. THE FOLLOWING INFORMATION SHALL BE SHOWN ON LABEL:
- VISTEON PART NUMBER
VISTEON PART DESCRIPTION
NISSAN PART NUMBER
BUILD DATE
MANUFACTURING PLACE
- LABEL MATERIAL: ESF-M99J288-A WHITE POLYESTER SUBSTRATE 2 MIL THICK

LTRS	REVISIONS		
DATE	ORIGINATOR	REVIEWER	ENGR APP
RELEASE FOR STUDY VPSASF-19C037-AA DE00 E 11560247 002 040107			
040107	FDIDATO	UNCHECKED	GZHA03
RELEASE FOR PRODUCTION VPSASF-19C037-AA DE00 E 11560247 003 040206			
040127	FDIDATO	DHOLMES3	GZHA03

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OPERATION	UNIT	PLANT	SAFETY
N/A	N/A	N/A	N/A
DRAFTED IN ACCORDANCE WITH VISTEON ENGINEERING CAD STANDARDS CURRENT AT INITIAL RELEASE		MUST COMPLY WITH VISTEON AND APPLICABLE OEM RESTRICTED SUBSTANCE MANAGEMENT STANDARDS	
INITIAL	DATE	INITIAL	DATE
ORIGINATOR	031104	REVIEWER	040129
FDIDATO		DHOLMES3	
GZHA03		GZHA03	
3RD ANGLE PROJ	CUSTOMER DATA TYPE		SCALE: 1:1 UNITS: MM
	N/A		SHT 1 OF 1 RH/LH:
	CUSTOMER NUMBER		CPSC: 15.02.00 ANTENNA
	N/A		DATA IS MASTER
NAME			
ANTENNA ASY - BLUETOOTH			
CAD FILE			
DWG FILE VPSASF-19C037-A			
DATA LOC TMS		DATA TYPE I-DEAS	
PRODUCT TMS			
NUMBER VPSASF-19C037-AA			

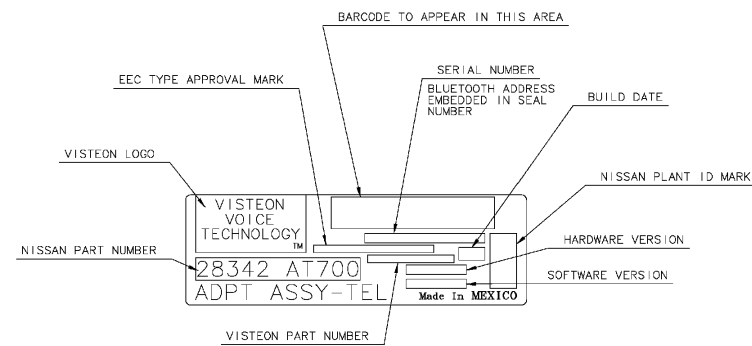
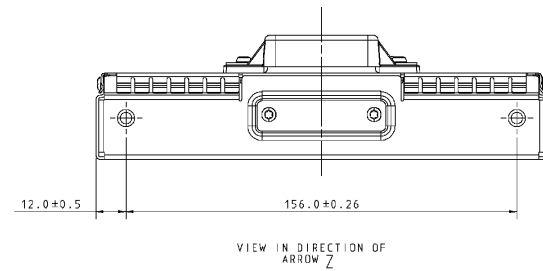
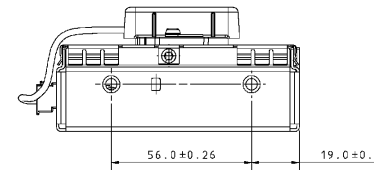
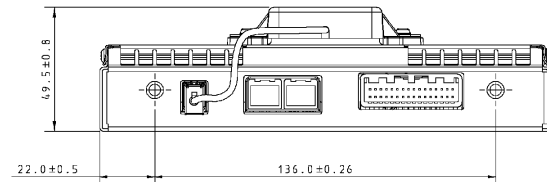
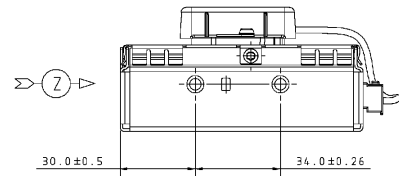
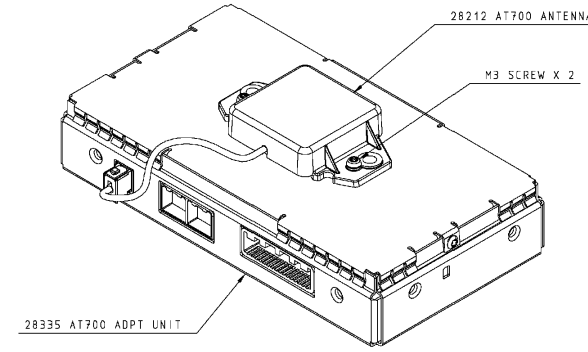
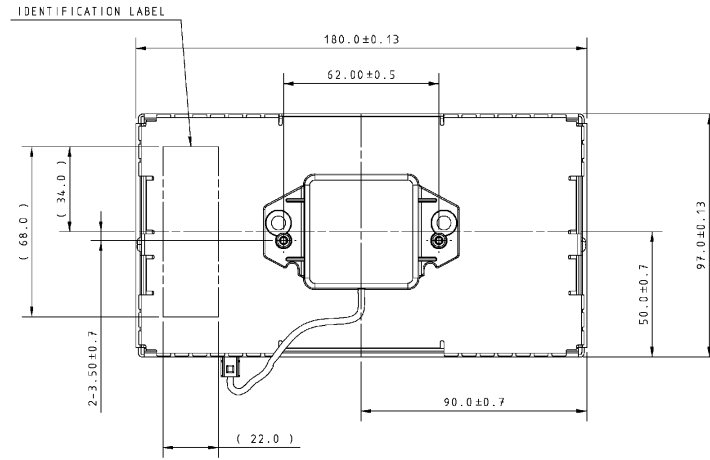


DRW SIZE A170

SYSTEM OVERVIEW

The BTHF (Bluetooth Handsfree) system is intended to achieve hands-free capabilities in a vehicle. The BTHF unit will be the user interface for the Bluetooth phone. The BTHF system boundaries include the BTHF unit, a Bluetooth antenna, J1850 network to radio head unit, 1 LED, and PTT/SEND and MODE/END buttons.

This drawing is an assembly drawing of "ADPT UNIT-TEL" and "ANT ASSY-TEL." Refer to drawing of each component for a detail description.



TYPE A IDENTIFICATION LABEL (2:1)

MATERIAL CONTROL FOR SCREW PER NES-M0301
SCREW MATERIAL: ZINC/TIN PLATED STEEL

NO.	QTY.	Visteon PART NUMBER	Visteon PART NAME	REMARKS
3	2	W704825-S415	M3 SCREW	
2	1	VPSASF-19C037-AA	ANT ASSY-TEL	
1	1	VPSASF-14B409-AA	ADPT UNIT-TEL	

510		ADPT ASSY-TEL	28342 AT700
MASS(g)	MATERIAL	NISSAN PART NAME	NISSAN PART NO.
THIRD ANGLE PROJECTION			
SCALE 1:1			
DRAWN BY		DESIGNED BY	CHECKED BY
APPROVED BY			

SIGN		K13-C499		HISTORY		SIGN	
DATE	SPEC NOTE NO.	CHG LV.	NOTE NO.	SYMB	DATE	DESIGN NOTE NO.	DATE
1,2	3						
DRAWING NAME ADPT ASSY-TEL							SIZE AO
DRAWING NO. 28342 AT700-PF							DWG. TV
DRAWING NAME MOD ASY-INTRFC WIRLS							
DRAWING NO. VPSASF-14B409-BE							
				IMPORTANT SYMB	KIND OF DWG		