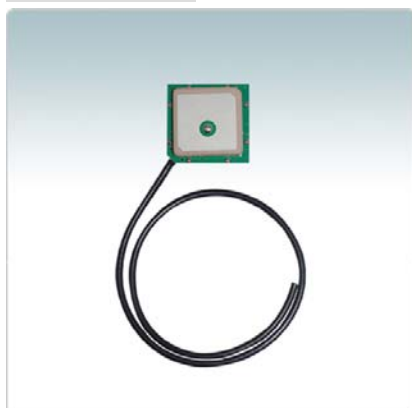


## 014610 GPS Antennas - Module Antennas - HAG-100-A -

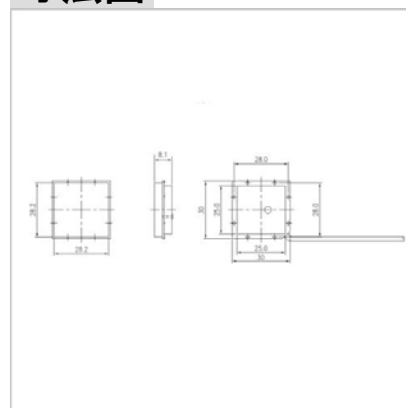
### 仕様

Model	HAG-100-A
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz $\pm$ 1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	+4dBi typical
Axial Ratio	3dB max
Impedance	50 $\Omega$
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz $\pm$ 1.023 MHz
VSWR	Less than 2.0
Polarization	RHCP
Impedance	50 $\Omega$
LNA Gain	25 $\pm$ 2dB / 26 $\pm$ 2dB
Noise Figure	2.0dB (max)
Band Attenuation	20dB min @Fo $\pm$ 50 MHz
Axial Ratio	3dB max
Voltage	DC +3V / DC +5V ( $\pm$ 10% )
Current	20mA (max)
<b>MECHANICAL</b>	
Height	9.1 mm
Width	31 x 31 mm
Cable	RG-174 5m, 1.5D-2V 5m Other Types(Optional)
Connector	SMA Other Types(Optional)
<b>ENVIROMENTAL</b>	
Operating Temp.	-30 $^{\circ}$ C ~ +80 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C ~ +90 $^{\circ}$ C
<b>APPLICATION:</b> Car Navigation	

### 製品写真



### 寸法図

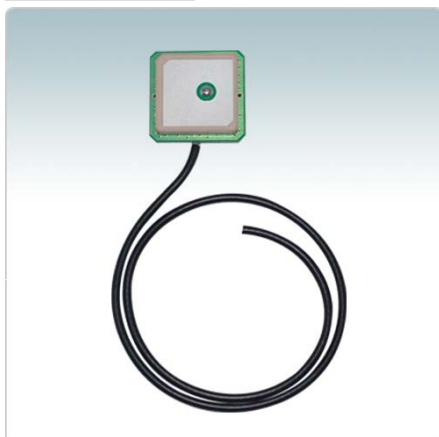


## 014611 GPS Antennas - Module Antennas - HAG-101-A -

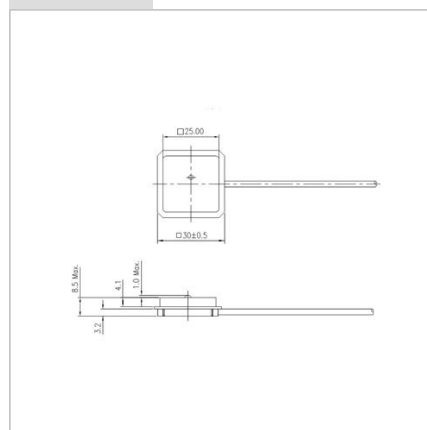
### 仕様

Model	HAG-101-A
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz $\pm$ 1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	+4dBi typical
Axial Ratio	3dB max
Impedance	50 $\Omega$
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz $\pm$ 1.023 MHz
VSWR	Less than 2.0
Polarization	RHCP
Impedance	50 $\Omega$
LNA Gain	25 $\pm$ 2dB
Noise Figure	2.0dB (max)
Band Attenuation	20dB min @Fo $\pm$ 50 MHz
Axial Ratio	3dB max
Voltage	DC +3V to +5V
Current	20mA (max)
<b>MECHANICAL</b>	
Height	8.5 mm
Width	30.0 x 30.0 mm
Cable	RG-174 5m, 1.5D-2V 5m Other Types(Optional)
Connector	SMA Other Types(Optional)
<b>ENVIROMENTAL</b>	
Operating Temp.	-30 $^{\circ}$ C $\sim$ +80 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C $\sim$ +90 $^{\circ}$ C
<b>APPLICATION: Car Navigation</b>	

### 製品写真



### 寸法図

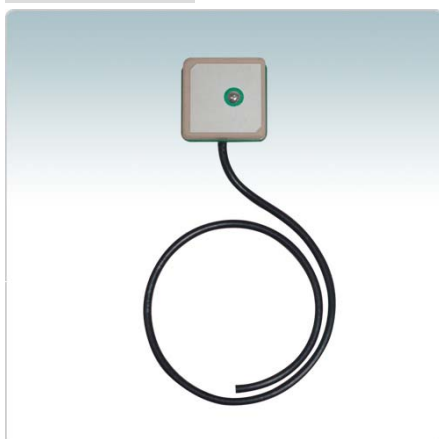


## 014612 GPS Antennas - Module Antennas - HAG-130-A -

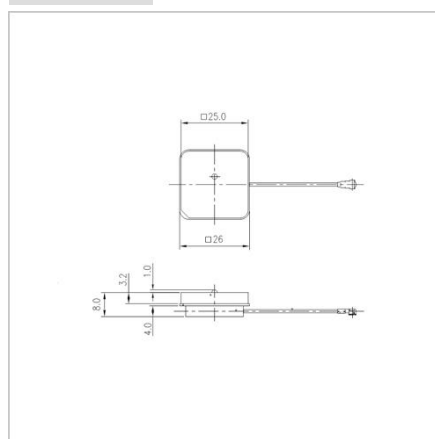
### 仕様

Model	HAG-130-A
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz $\pm$ 1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	+4dBi typical
Axial Ratio	3dB max
Impedance	50 $\Omega$
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz $\pm$ 1.023 MHz
VSWR	Less than 2.0
Impedance	50 $\Omega$
LNA Gain	28dB/ 32dB ( $\pm$ 2dB)
Noise Figure	2.0dB (max)
Band Attenuation	20dB min @Fo $\pm$ 50 MHz
Axial Ratio	3dB max
Voltage	DC +3V / DC +5V ( $\pm$ 10%)
Current	20mA (max)
<b>MECHANICAL</b>	
Height	9.1 mm
Width	26.5 x 26.5 mm
Cable	RG-174 5m, 1.5D-2V 5m Other Types(Optional)
Connector	SMAOther Types(Optional)
<b>ENVIROMENTAL</b>	
Operating Temp.	-30 $^{\circ}$ C ~ +80 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C ~ +90 $^{\circ}$ C
<b>APPLICATION:</b> Car Navigation	

### 製品写真



### 寸法図



## 014613 GPS Antennas - Module Antennas - HAG-140-A -

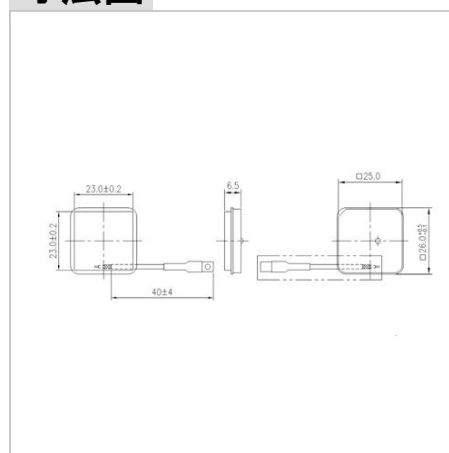
### 仕様

Model	HAG-140-A-3V
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz $\pm$ 1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	+4dBi typical
Axial Ratio	3dB max
Impedance	50 $\Omega$
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz $\pm$ 1.023 MHz
VSWR	Less than 2.0
Impedance	50 $\Omega$
LNA Gain	20dB ( $\pm$ 2dB)
Noise Figure	2.0dB (max)
Band Attenuation	20dB min @Fo -50 MHz 15dB min @Fo +50 MHz
Axial Ratio	3dB max
Voltage	DC +3V ( $\pm$ 10% )
Current	20mA (max)
<b>MECHANICAL</b>	
Height	6.6 mm
Width	27.0 x 27.0 mm
Cable	RG-174 5m, 1.5D-2V 5m Other Types(Optional)
Connector	SMA Other Types(Optional)
<b>ENVIROMENTAL</b>	
Operating Temp.	-30 $^{\circ}$ C ~ +80 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C ~ +90 $^{\circ}$ C
<b>APPLICATION: Car Navigation</b>	

### 製品写真



### 寸法図

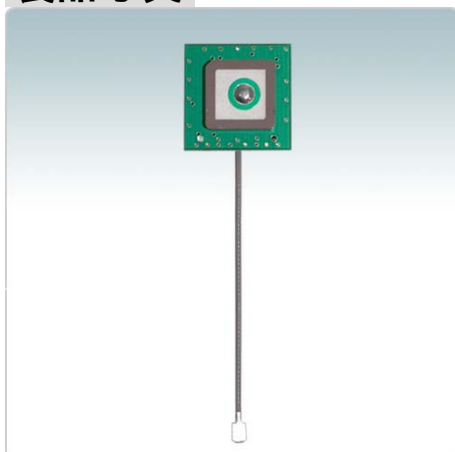


## 014614 GPS Antennas - Module Antennas - HAG-325-A -

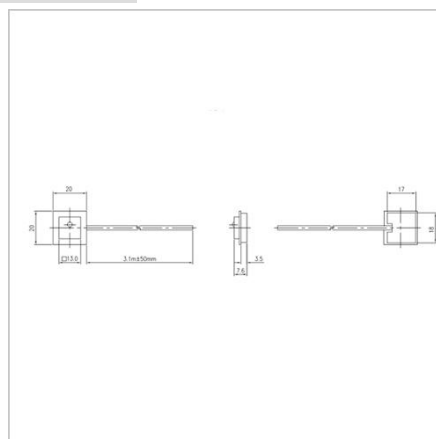
### 仕様

Model	HAG-325-A
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz $\pm$ 1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	-2dBi typical
Impedance	50 $\Omega$
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz $\pm$ 1.023 MHz
VSWR	Less than 2.0
Polarization	RHCP
Impedance	50 $\Omega$
LNA Gain	25dB $\pm$ 2dB
Noise Figure	2.0dB (max)
Band Attenuation	20dB min @Fo $\pm$ 50 MHz
Voltage	DC +3V/DC +5V ( $\pm$ 10% )
Current	20mA (max)
<b>MECHANICAL</b>	
Height	7.6 mm
Width	20 x 20 mm
Cable	RG-174, 1.5D-2V Other Types(Optional)
Connector	SMA Other Types(Optional)
<b>ENVIROMENTAL</b>	
Operating Temp.	-30 $^{\circ}$ C $\sim$ +80 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C $\sim$ +90 $^{\circ}$ C
<b>APPLICATION:</b> Car Navigation	

### 製品写真



### 寸法図



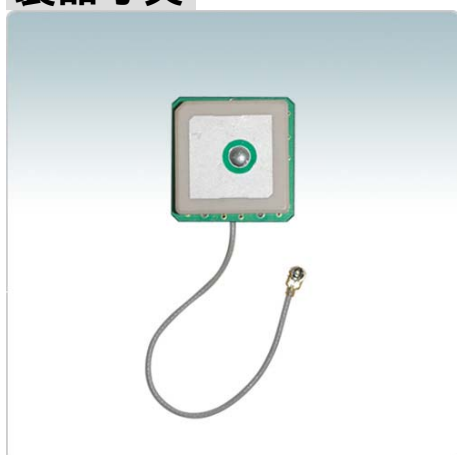
## 014615 GPS Antennas - Module Antennas - HAG-400-A-3V -

### 仕様

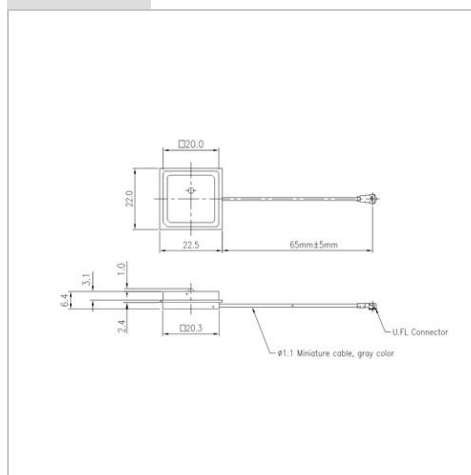
#### ◆ HAG-400-A-3V

Model	HAG-400-A-3V
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz ±1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	+2dBi typical
Axial Ratio	3dB typical 6dB max
Impedance	50 Ω
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz ±1.023 MHz
VSWR	Less than 2.0
Impedance	50 Ω
LNA Gain	26dB ( ± 2dB)
Noise Figure	2.0dB (max)
Band Attenuation	20dB min @Fo ± 50 MHz
Axial Ratio	3dB max
Voltage	DC +3V ( ± 10% )
Current	20mA (max)
<b>MECHANICAL</b>	
Height	7.3 mm
Width	22.5 x 22.5 mm
Cable	RG-174 5m, 1.5D-2V 5m Other Types(Optional)
Connector	SMA Other Types(Optional)
<b>ENVIROMENTAL</b>	
Operating Temp.	-30℃ ~ +80℃
Storage Temp.	-40℃ ~ +90℃
<b>APPLICATION: Car Navigation</b>	

### 製品写真



### 寸法図

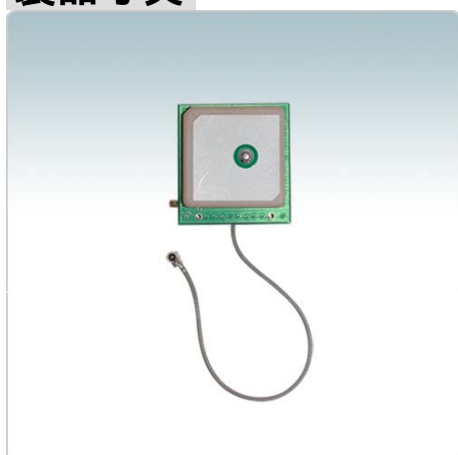


## 014616 GPS Antennas - Module Antennas - HAG-MS25-A-3V -

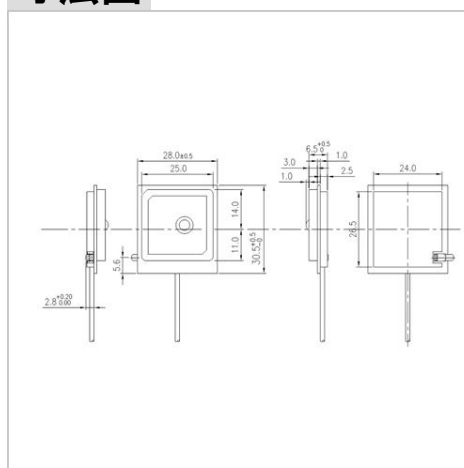
### 仕様

Model	HAG-MS25-A-3V
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz $\pm$ 1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	+4dBi typical
Axial Ratio	3dB max
Impedance	50 $\Omega$
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz $\pm$ 1.023 MHz
VSWR	Less than 2.0
Impedance	50 $\Omega$
LNA Gain	25dB ( $\pm$ 2dB)
Noise Figure	2.0dB (max)
Band Attenuation	20dB min @Fo $\pm$ 50 MHz
Voltage	DC +3V ( $\pm$ 10% )
Current	20mA (max)
<b>MECHANICAL</b>	
Height	6.5 mm
Width	28.0 x 30.5 mm
Cable	Miniature Cable x 50mm Other Types(Optional)
Connector	HFL Other Types(Optional)
External Connector	MOB-242
<b>ENVIROMENTAL</b>	
Operating Temp.	-30 $^{\circ}$ C $\sim$ +80 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C $\sim$ +90 $^{\circ}$ C
<b>APPLICATION:</b> Car Navigation, Portable Navigation	

### 製品写真



### 寸法図

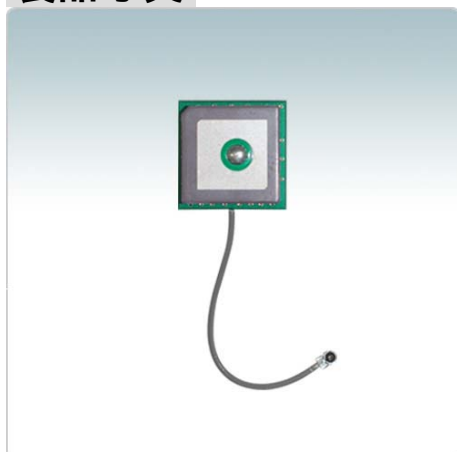


## 014617 GPS Antennas – Module Antennas - HAG-S330-A-3V -

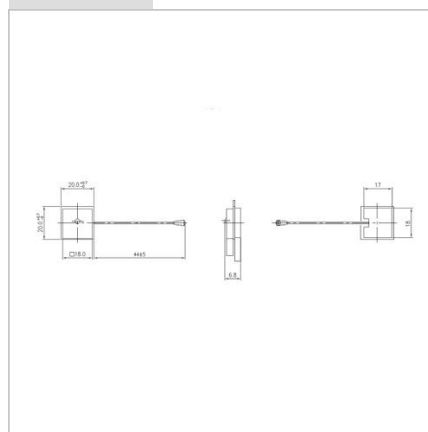
### 仕様

Model	HAG-S330-A-3V
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz $\pm$ 1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	+0dBi typical
Impedance	50 $\Omega$
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz $\pm$ 1.023 MHz
VSWR	Less than 2.0
Polarization	RHCP
Impedance	50 $\Omega$
LNA Gain	26dB ( $\pm$ 2dB)
Noise Figure	2.0dB (max)
Band Attenuation	20dB min @Fo $\pm$ 50 MHz
Voltage	DC +3V ( $\pm$ 10% )
Current	20mA (max)
<b>MECHANICAL</b>	
Height	6.8 mm
Width	20 x 20 mm
Cable	Miniature Cable x 44mm Other Types(Optional)
Connector	U.FL, Other Types(Optional)
<b>ENVIROMENTAL</b>	
Operating Temp.	-30 $^{\circ}$ C $\sim$ +80 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C $\sim$ +90 $^{\circ}$ C
<b>APPLICATION:</b> Car Navigation	

### 製品写真



### 寸法図





## 014618 GPS Antennas - Module Antennas - HAG-3200B -

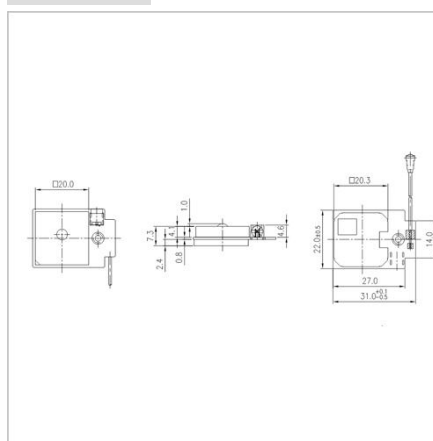
### 仕様

Model	HAG-3200B
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz $\pm$ 1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	+2dBi typical
Axial Ratio	3dB typical 6dB max
Impedance	50 $\Omega$
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz $\pm$ 1.023 MHz
VSWR	Less than 2.0
Impedance	50 $\Omega$
LNA Gain	28dB ( $\pm$ 2dB)
Noise Figure	2.0dB (max)
Band Attenuation	17dB min @ Fo $\pm$ 50 MHz
Voltage	DC +3V ( $\pm$ 10% )
Current	20mA (max)
<b>MECHANICAL</b>	
Height	7.4 mm
Width	22.0 x 31.0 mm
Cable	Miniature Cable x 50mm Other Types(Optional)
Connector	U.FL Other Types(Optional)
External Connector	MCX Right Angle Jack (SMD)
<b>ENVIROMENTAL</b>	
Operating Temp.	-30 $^{\circ}$ C ~ +80 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C ~ +90 $^{\circ}$ C
<b>APPLICATION:</b> Car Navigation, Portable Navigation	

### 製品写真



### 寸法図



## 014619 GPS Antennas - Module Antennas - HAG-3200S -

### 仕様

Model	HAG-3200S
<b>ANTENNA ELEMENT</b>	
Center Frequency	1575.42 MHz $\pm$ 1.023 MHz
Polarization	R.H.C.P.
Gain @ Zenith	+2dBi typical
Axial Ratio	3dB typical 6dB max
Impedance	50 $\Omega$
<b>LOW NOISE AMPLIFIRE</b>	
Frequency	1575.42 MHz $\pm$ 1.023 MHz
VSWR	Less than 2.0
Impedance	50 $\Omega$
LNA Gain	28dB ( $\pm$ 2dB)
Noise Figure	2.0dB (max)
Band Attenuation	17dB min @Fo $\pm$ 50 MHz
Voltage	DC +3V ( $\pm$ 10% )
Current	20mA (max)
<b>MECHANICAL</b>	
Height	7.4 mm
Width	23.0 x 37.0 mm
Cable	Miniature Cable x 85mm Other Types(Optional)
Connector	U.FL Other Types(Optional)
External Connector	MCX Straight Jack (SMD)
<b>ENVIROMENTAL</b>	
Operating Temp.	-30 $^{\circ}$ C ~ +80 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C ~ +90 $^{\circ}$ C
<b>APPLICATION: Car Navigation, Portable Navigation</b>	

### 製品写真



### 寸法図

