



*Released*

# **Insat C-band 5W BUC**

RF Frequency: 6.725 to 7.025 GHz

## Model No. NJT5670

IF / Ref. (10MHz) / DC Power Input: N-type Female Connector

## Model No. NJT5670F

IF / Ref. (10MHz) / DC Power Input: F-type Female Connector

## Specifications

Rev.07 January 30, 2017

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Microwave Division

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## 1. Electrical Specifications

#	Items	Specifications
1-1.	Output Frequency Range	6.725 to 7.025 GHz
1-2.	Input Frequency Range	965 to 1,265 MHz
1-3.	Maximum IF Input Level (without damage)	+10 dBm max.
1-4.	Conversion Type	Single, fixed L.O.
1-5.	L.O. Frequency	5.76 GHz
1-6.	Frequency Sense	Positive
1-7.	Output Power @ 1dB G.C.P.	+37 dBm min. over temp.
1-8.	Linear Gain	61 dB nominal
1-9.	Gain Variation over frequency @ fixed temperature	5.0 dBp-p max. over 300 MHz 2.0 dBp-p max. over 36 MHz
1-10.	Gain Stability over temperature @ fixed frequency	5.0 dBp-p max.
1-11.	Requirement for External Reference [Frequency] [Input Power] [Phase Noise]	10 MHz (sine-wave) -5 to +5 dBm @ Input port -120 dBc/Hz max. @ 100 Hz -130 dBc/Hz max. @ 1 kHz -140 dBc/Hz max. @ 10 kHz -150 dBc/Hz max. @ 100 kHz
1-12.	L.O. Phase Noise	-60 dBc/Hz max. @ 100 Hz -70 dBc/Hz max. @ 1 kHz -80 dBc/Hz max. @ 10 kHz -90 dBc/Hz max. @ 100 kHz
1-13.	Spurious @ Pout = +37 dBm [In-band] [Receive band] [Out-of-band]	-50 dBc max. @ 6.725 to 7.025 GHz -70 dBm max. @ 4.500 to 4.800 GHz -50 dBc max.
1-14.	Receive Band Noise Power	-87 dBm/4kHz max. @ 4.500 to 4.800 GHz
1-15.	Input Impedance <N-type Model> <F-type Model>	50 ohms nom. 75 ohms nom.
1-16.	Input V.S.W.R.	2 : 1 max.
1-17.	Output V.S.W.R.	2 : 1 max.
1-18.	Output Load VSWR for Non Damage	Infinite : 1
1-19.	DC Power Requirement [Voltage Range] [Power Consumption]	+15 to +30 VDC 48 W max.
1-20.	Mute	Shut off the HPA in case of L.O. unlocked or no 10 MHz reference signal.
1-21.	LED Indicator	GREEN: LO locked RED: LO unlocked (or no 10 MHz reference signal)

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## 2. Mechanical Specifications

#	Items	Specifications
2-1.	Input Interface <N-type Model> <F-type Model>	IF / Ref. / DC Input: N-type female connector, 50 ohms F-type female connector, 75 ohms
2-2.	Output Interface	Waveguide, CPR-137 (with Grooved)
2-3.	Dimension & Housing	190.6 mm (L) x 160 mm (W) x 59 mm (H) [7.50" (L) x 6.30" (W) x 2.32" (H)] without interface connectors and screws
2-4.	Weight	1.9 kg max. [4.2 lbs]

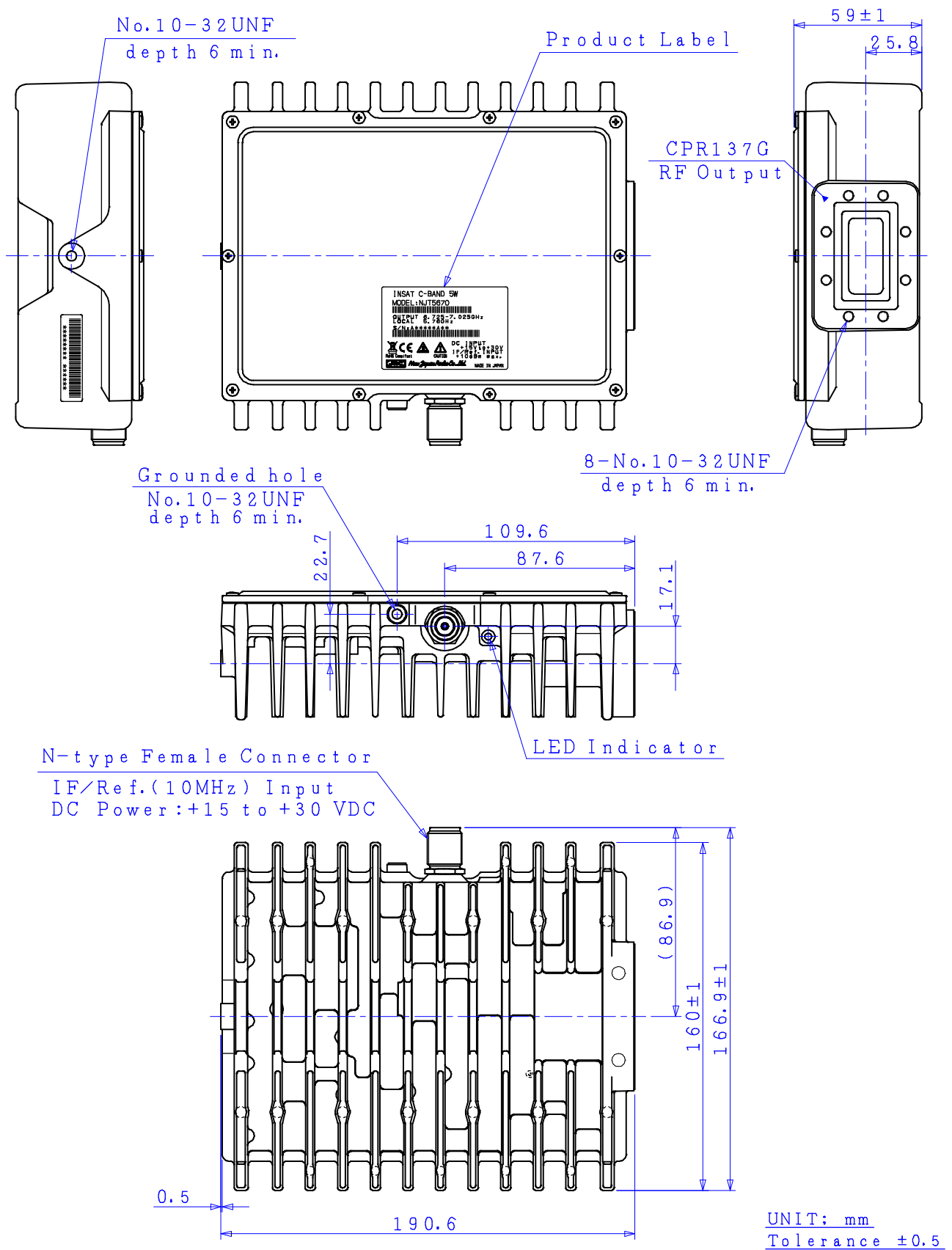
## 3. Environmental Specifications

#	Items	Specifications
3-1.	Temperature Range (ambient) [Operating] [Storage]	-40 to +55 °C -40 to +75 °C
3-2.	Humidity	0 to 100 %
3-3.	Altitude	15,000 feet
3-4.	Vibration	5 G (3 axis, 50 Hz to 2 kHz) 1 mm p-p (3 axis, 5 to 50 Hz)
3-5.	Shock	30 G (3 axis)
3-6.	Waterproof / Dustproof (IP Code)	IP 67
3-7.	Regulations	EU Directive (CE Marking) EMC (2014/30/EC) RoHS (2011/65/EU) Safety: EN60950-1
3-8.	Comply with RoHS (Restricting the use of Hazardous Substances) directives	

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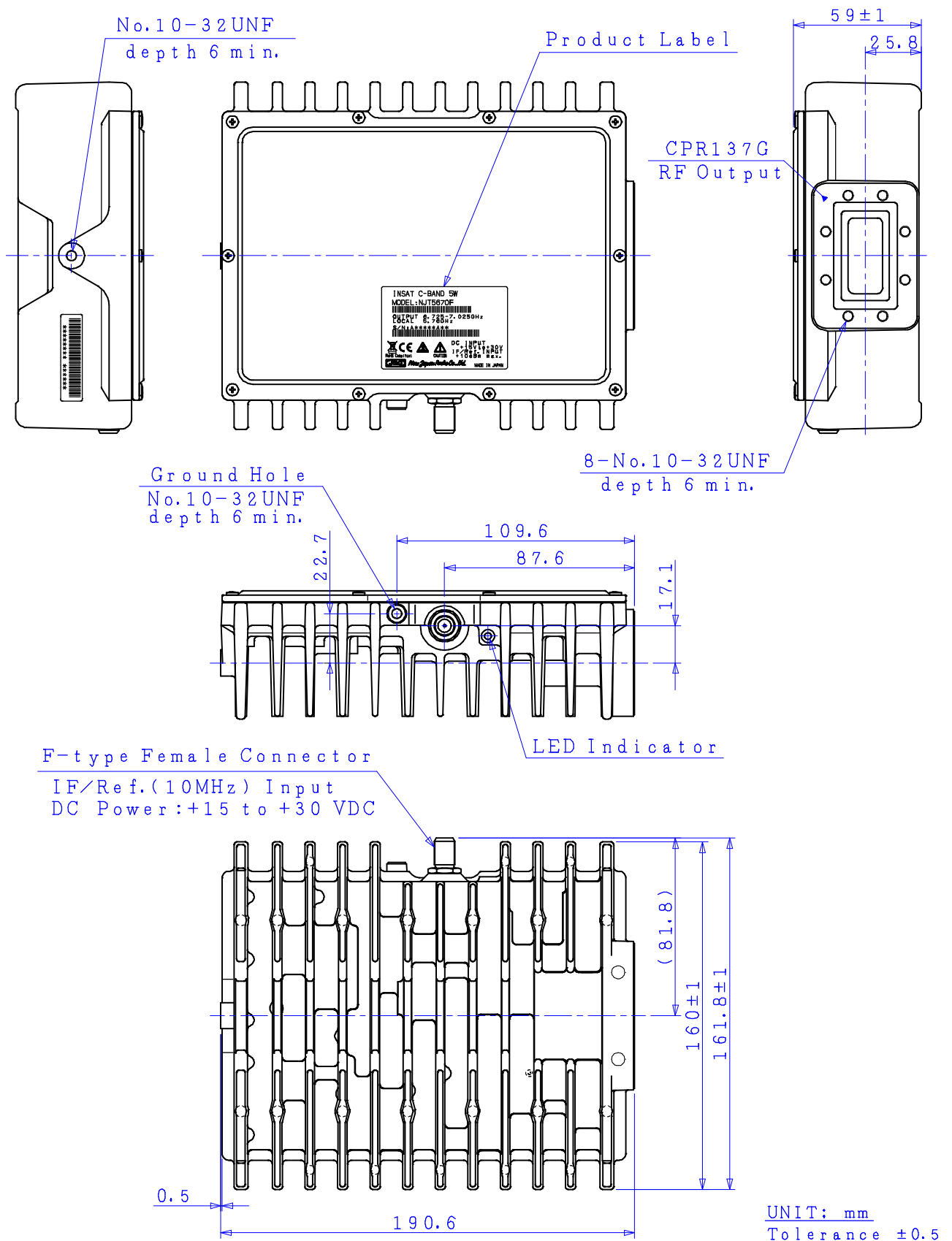
#### 4. Outline Drawing

- NJT5670 (IF / Ref. (10MHz) / DC Power Input: N-type Female Connector) -



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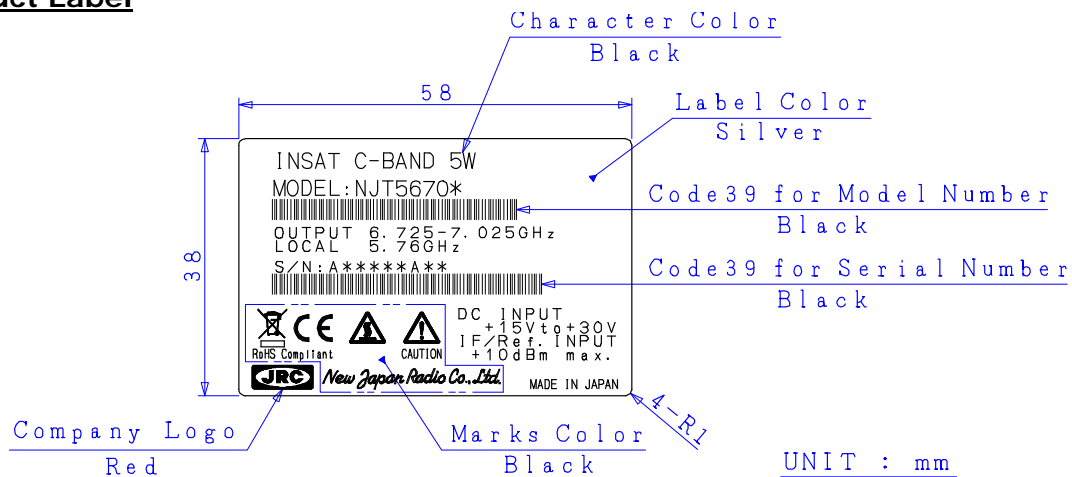
- NJT5670F (IF / Ref. (10MHz) / DC Power Input: F-type Female Connector) -



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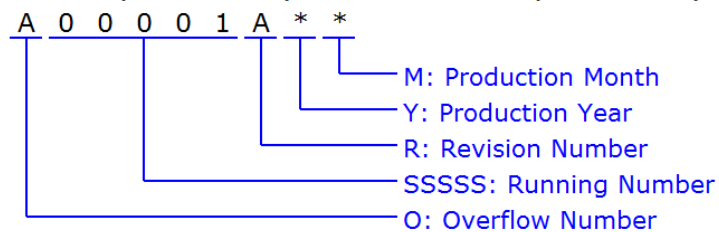
## 5. Label

### Product Label



### Definition of Serial Number

Serial Number (OSSSSRYM) - ALPHANUMERIC (9 characters)



O: Overflow Number - ALPHABET (1 character)

"A" to "Z", e.g.: A99999 ⇒ B00001

SSSS: Running Number - NUMBER (5 digits)

"00001" to "99999"

R: Revision Number - ALPHABET (1 character)

"A" to "Z"

Y: Production Year - NUMBER (1 digit)

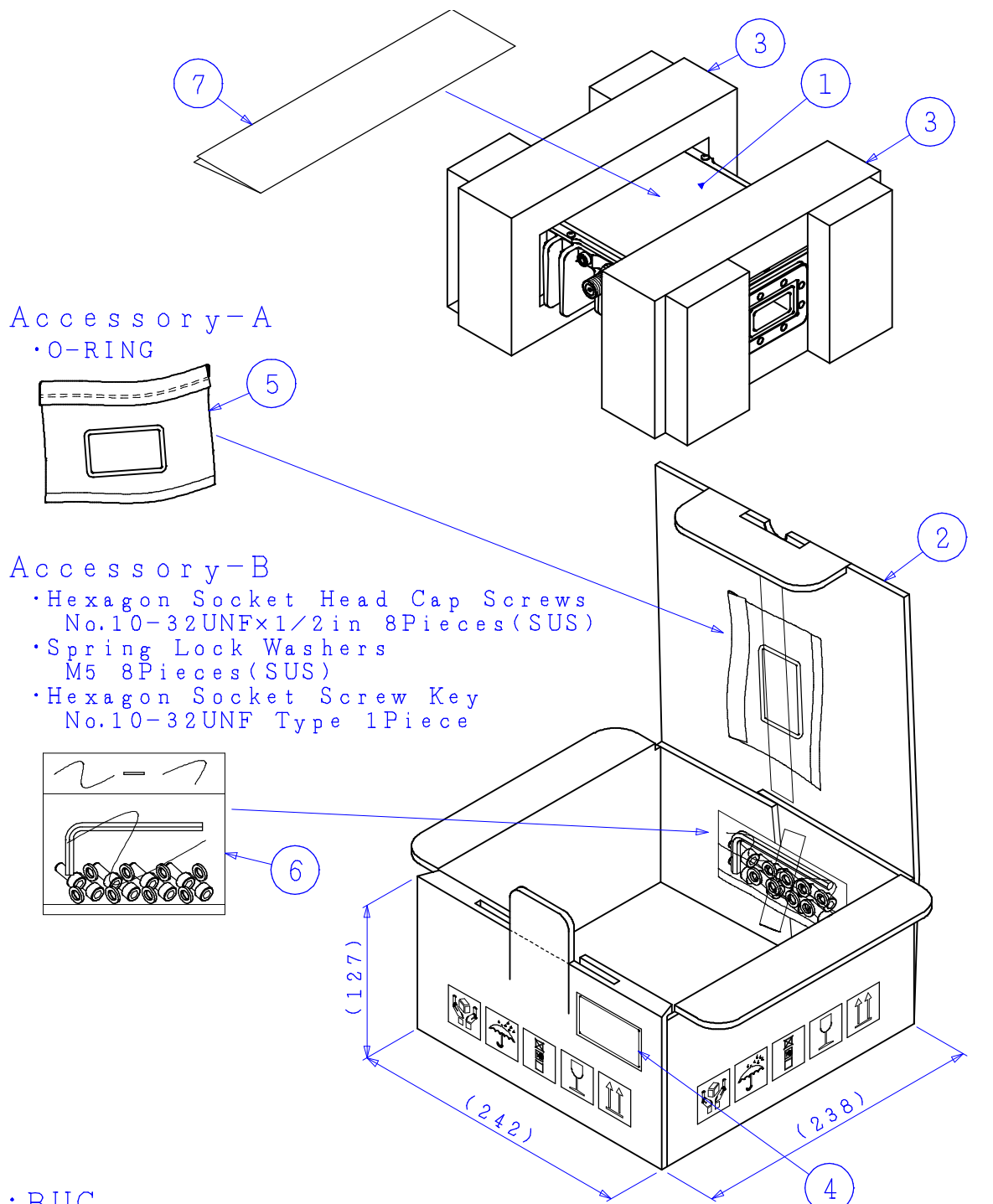
Calendar Number, e.g.: 2009:9, 2010:0, 2011:1, 2012:2 ...

M: Production Month - ALPHANUMERIC (1 character)

"1" to "9", "X" as October, "Y" as November, "Z" as December

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## 6. Package Individual Package



Accessory-A  
·O-RING

Accessory-B  
·Hexagon Socket Head Cap Screws  
No.10-32UNF×1/2in 8Pieces(SUS)  
·Spring Lock Washers  
M5 8Pieces(SUS)  
·Hexagon Socket Screw Key  
No.10-32UNF Type 1Piece

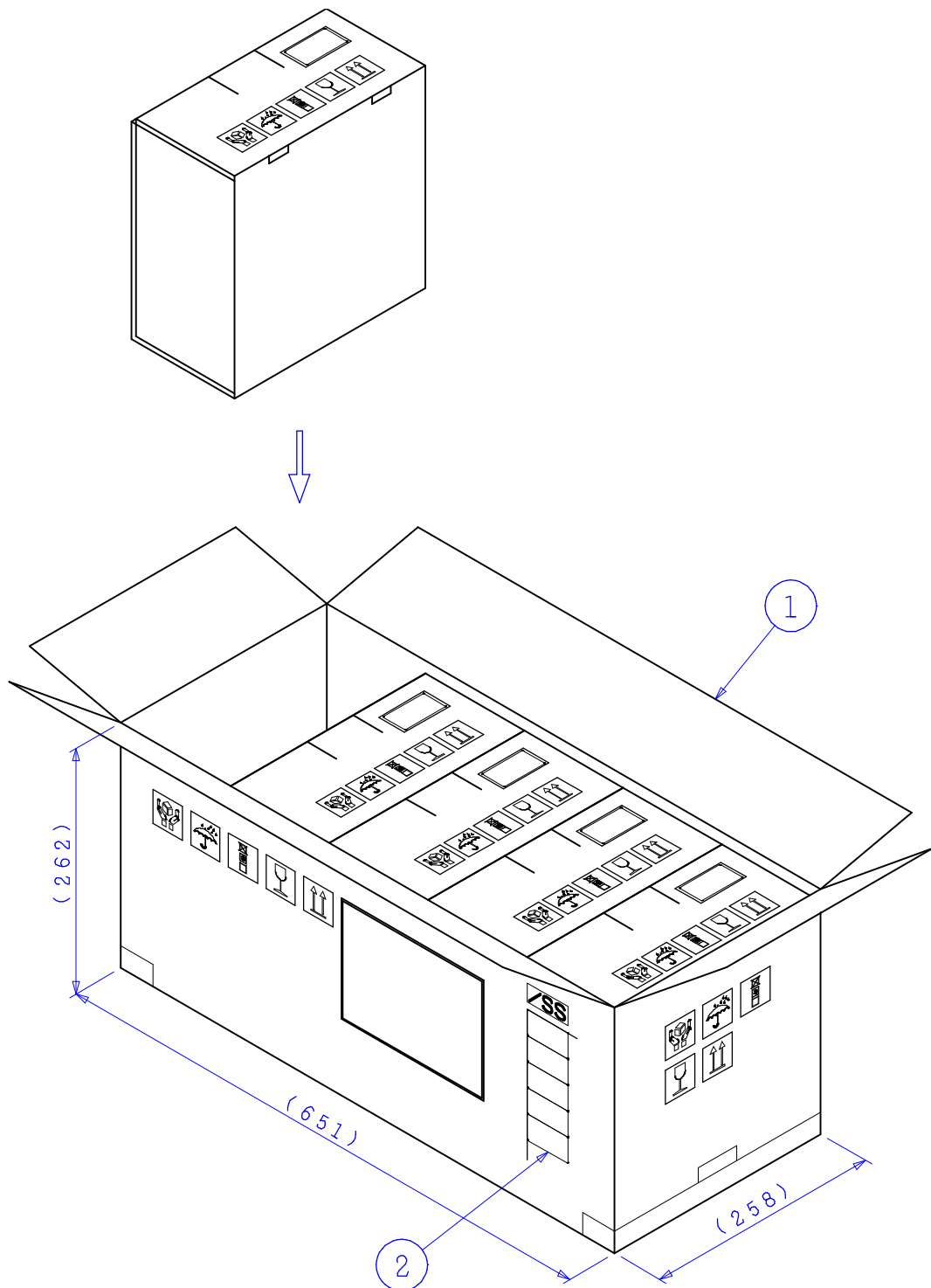
- ①: BUC
- ②: Single Wall Corrugated Fiberboard
- ③: Polyethylene Foam For Package Cushioning
- ④: Label
- ⑤: Accessory-A
- ⑥: Accessory-B
- ⑦: Data Sheet

UNIT:mm

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### Shipping Package



①: Double Wall Corrugated Fiberboard  
②: Label

UNIT: mm

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