



Released

Palapa C-band 5W BUC

RF Frequency: 6.365 to 6.725 GHz

Model No. NJT5675N

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

Model No. NJT5675F

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

Specifications

Rev.07 January 30, 2017

Copyright 2017

New Japan Radio Co., Ltd.
Microwave Division

-Notice of Proprietary Information-

Documents and contents are proprietary to New Japan Radio Co., Ltd.
This publication and its contents may not be reproduced or distributed for any other purpose without the written permission of New Japan Radio Co., Ltd.



Caution

1. NJRC strives to produce reliable and high quality microwave components. NJRC's microwave components are intended for specific applications and require proper maintenance and handling. To enhance the performance and service of NJRC's microwave components, the devices, machinery or equipment into which they are integrated should undergo preventative maintenance and inspection at regularly scheduled intervals. Failure to properly maintain equipment and machinery incorporating these products can result in catastrophic system failures.
2. To ensure the highest levels of reliability, NJRC products must always be properly handled. The introduction of external contaminants (e.g. dust, oil or cosmetics) can result in failures of microwave components.
3. NJRC offers a variety of microwave components intended for particular applications. It is important that you select the proper component for your intended application. You may contact NJRC's sales office or sales representatives, if you are uncertain about the products listed in the catalog and the specification sheets.
4. Special care is required in designing devices, machinery or equipment, which demand high levels of reliability. This is particularly important when designing critical components or systems whose foreseeable failure can result in situations that could adversely affect health or safety. In designing such critical devices, equipment or machinery, careful consideration should be given to, amongst other things, their safety design, fail-safe design, back-up and redundancy systems, and diffusion design.
5. The products listed in the catalog and specification sheets may not be appropriate for use in certain equipment where reliability is critical or where the products may be subjected to extreme conditions. You should consult our sales office or sales representatives before using the products in any of the following types of equipment.
 - * Aerospace Equipment
 - * Equipment Used in the Deep Sea
 - * Power Generator Control Equipment (nuclear, steam, hydraulic)
 - * Life Maintenance Medical Equipment
 - * Fire Alarm/Intruder Detector
 - * Vehicle Control Equipment (automobile, airplane, railroad, ship, etc.)
 - * Various Safety Equipment
6. NJRC's products have been designed and tested to function within controlled environmental conditions. Do not use products under conditions that deviate from methods or applications specified in the catalog and specification sheets. Failure to employ NJRC's products in the proper applications can lead to deterioration, destruction or failure of the products. NJRC shall not be responsible for any bodily injury, fires or accidents, property damage or any consequential damages resulting from the misuse or misapplication of its products. **PRODUCTS ARE SOLD WITHOUT WARRANTY OF ANY OF KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**
7. The product specifications and descriptions listed in the catalog and specification sheets are subject to change at any time, without notice.

* Above Specifications are subject to change without notice.



1. Electrical Specifications

#	Items	Specifications
1-1.	Output Frequency Range	6.365 to 6.725 GHz
1-2.	Input Frequency Range	1,065 to 1,425 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	5.30 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	4.0 dBp-p max. over 360 MHz 1.5 dBp-p max. over 36 MHz
1-10.	Gain Stability over temperature @ fixed frequency	4.0 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. @ 6.365 to 6.725 GHz -70 dBm max. @ 3.400 to 4.200 GHz
1-14.	Receive Band Noise Power	-87 dBm/4kHz max. @ 3.400 to 4.200 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)

* Above Specifications are subject to change without notice.



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]

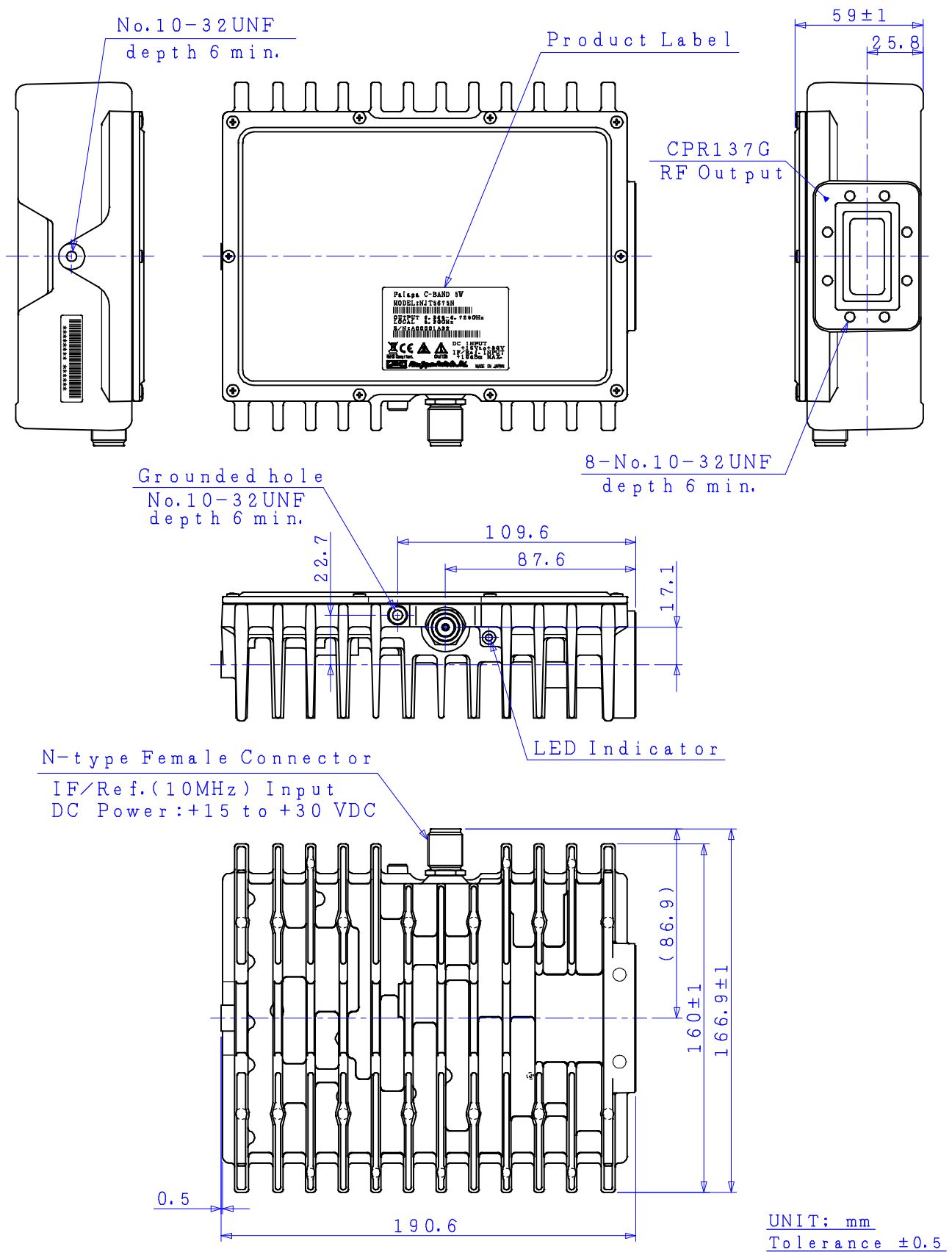
3. Environmental Specifications

#	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	

* Above Specifications are subject to change without notice.

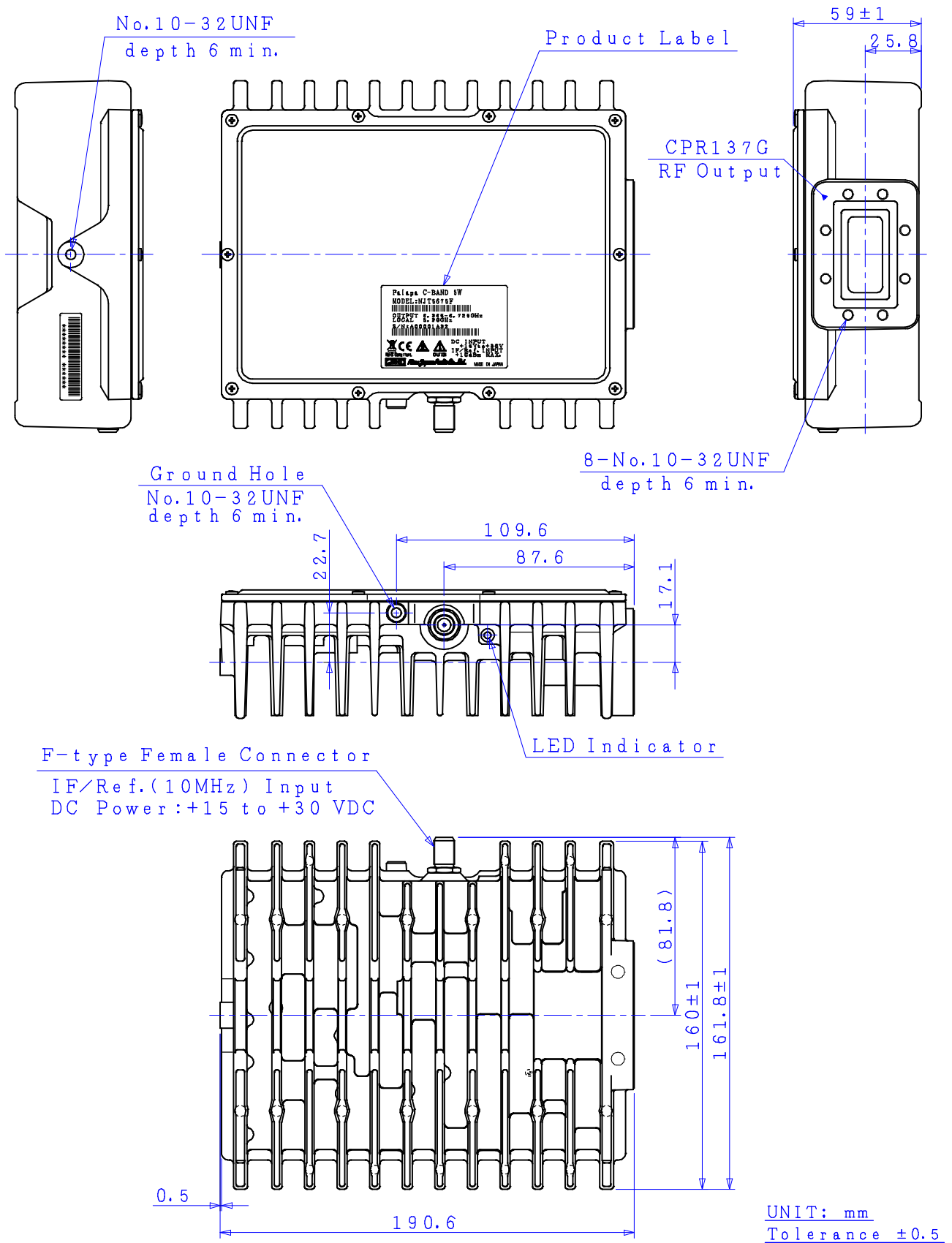
4. Outline Drawing

- NJT5675N (IF / Ref. (10MHz) / DC Power Input: N-type Female Connector) -



* Above Specifications are subject to change without notice.

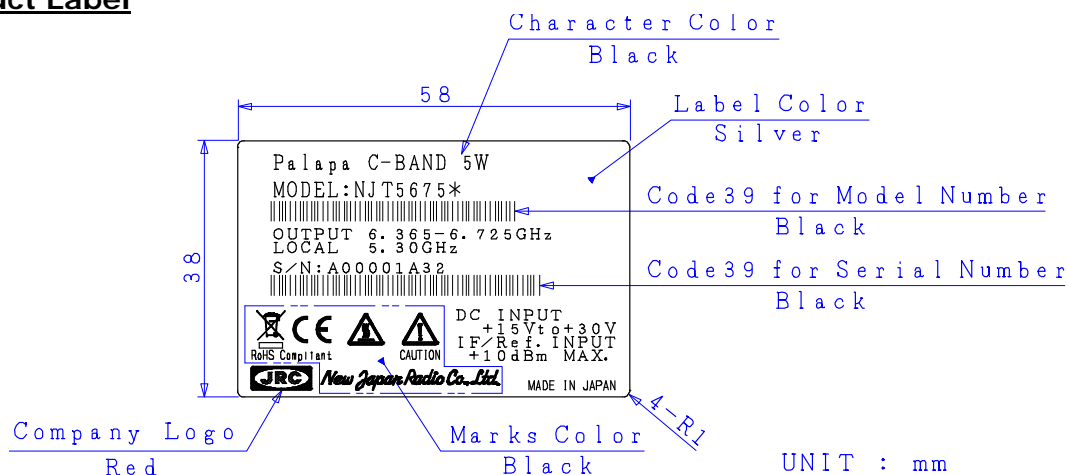
- NJT5675F (IF / Ref. (10MHz) / DC Power Input: F-type Female Connector) -



* Above Specifications are subject to change without notice.

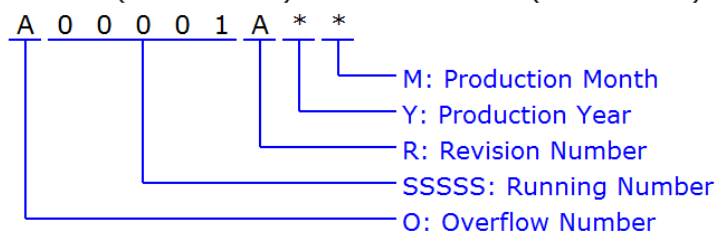
5. Label

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

SSSSS: Running Number - NUMBER (5 digits)

"00001" to "99999"

R: Revision Number - ALPHABET (1 character)

"A" to "Z"

Y: Production Year - NUMBER (1 digit)

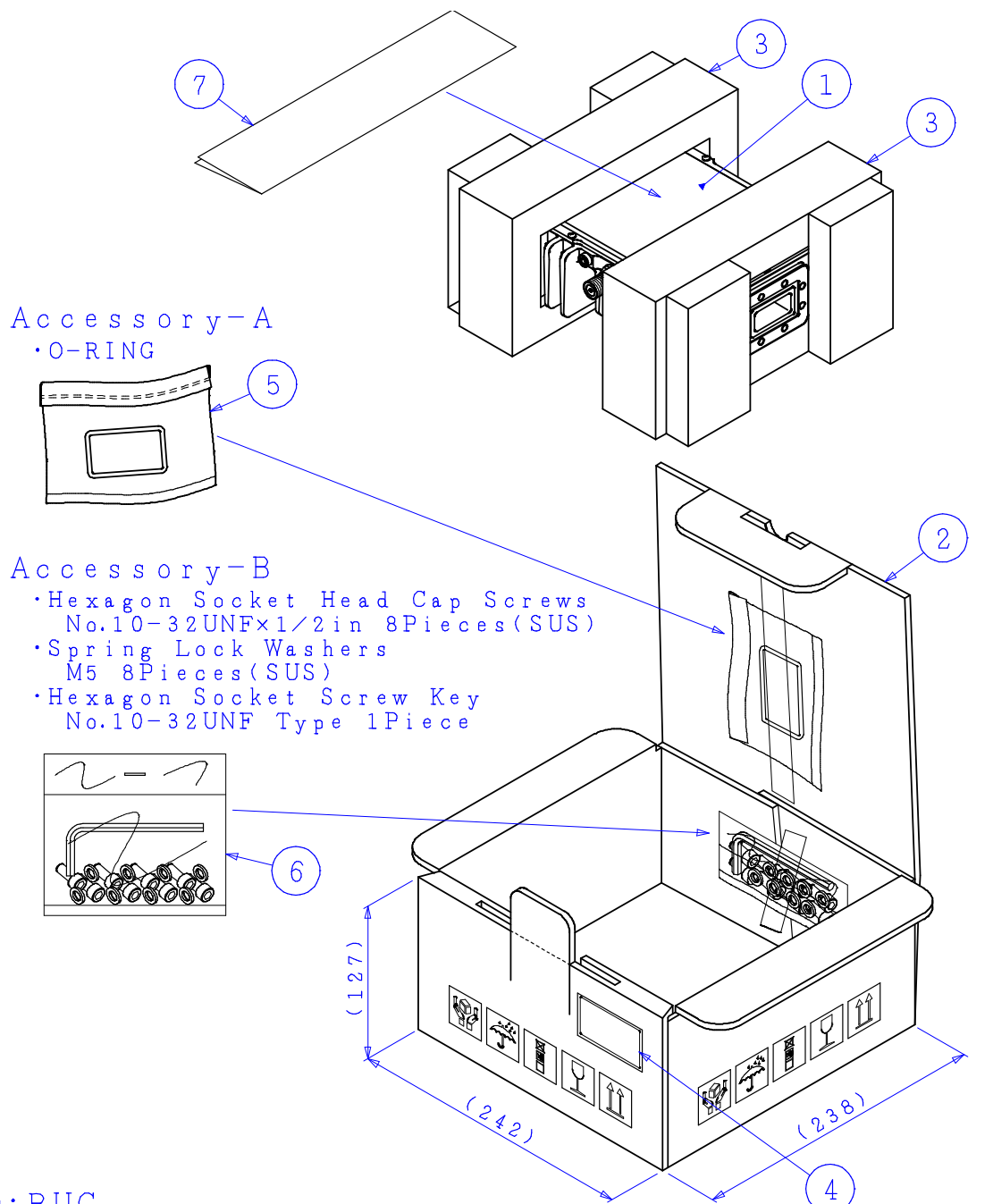
Calendar Number, e.g.: 2009:9, 2010:0, 2011:1, 2012:2 ...

M: Production Month - ALPHANUMERIC (1 character)

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

* Above Specifications are subject to change without notice.

6. Package Individual Package



Accessory-A
• O-RING

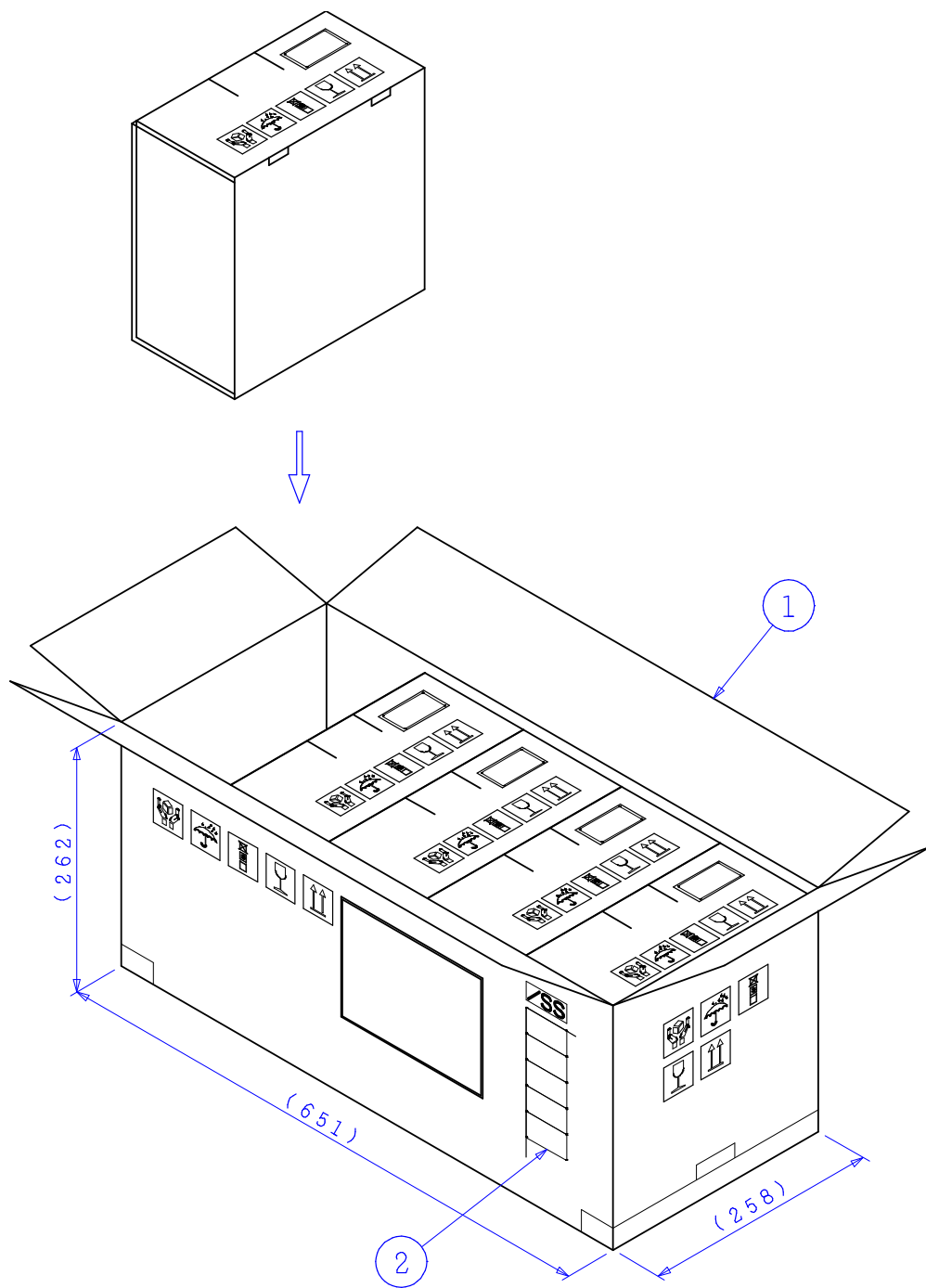
Accessory-B
• Hexagon Socket Head Cap Screws
No.10-32UNF×1/2in 8Pieces(SUS)
• Spring Lock Washers
M5 8Pieces(SUS)
• Hexagon Socket Screw Key
No.10-32UNF Type 1Piece

- 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

* Above Specifications are subject to change without notice.

Shipping Package



①: Double Wall Corrugated Fiberboard
②: Label

UNIT:mm

* Above Specifications are subject to change without notice.