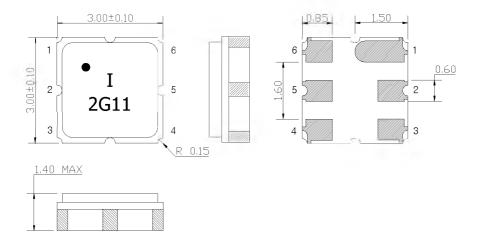


#### **Features**

- RF bandpass filter
- Usable bandwidth 60MHz
- No matching  $50\Omega$  single-ended operation
- Ceramic Surface Mounted Device (SMD) Package
- RoHS Compliant

#### **Package Dimensions**



Dimensions shown are nominal in millimeters

Body : Al<sub>2</sub>O<sub>3</sub> Ceramic Lid : Kovar, Ni Plated

Terminations : Au plating  $0.3 \sim 1.0$  um, Over a  $1.27 \sim 8.89$  um

Ni Plating

Pin Configuration		
2	Input	
5	Output	
1, 3, 4, 6	Case ground	

## **Maximum Ratings**

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	25	85
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	13
ESD classification level (HBM)	V	-	-	80



### **Specifications**

Fe = 2140.0MHz

Terminating source impedance :  $50\Omega$ Terminating load impedance :  $50\Omega$ 

		Minimum	Typical	Maximum
Center Frequency (Fc)	MHz	-	2140.0	-
Insertion Loss (Fc ± 30MHz)	dB	-	2.8	3.5
Amplitude Ripple (Fc ± 30MHz)	dB	-	1.0	2.0
VSWR (Fc ± 30MHz)	dB	-	2.8	3.0
Absolute Attenuation  500.0 ~ 1900.0 MHz  1900.0 ~ 2050.0 MHz  2230.0 ~ 2340.0 MHz  2340.0 ~ 3000.0 MHz	dB	40 30 30 30 30	43 35 35 33	

#### Notes:

- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances



#### **Matching Schematic**

(Actual matching values may vary due to PCB layout and parasities)



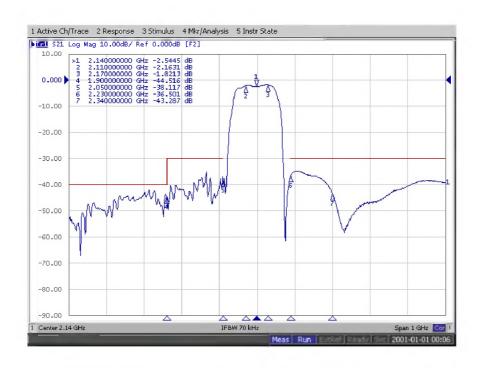
### **Marking Configuration**

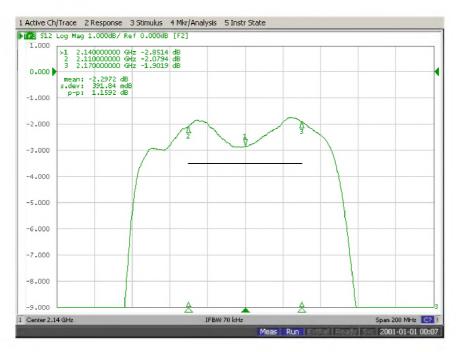


- 1) Pad Number 1 Index
- 2) Manufacturer name
- 3) Marking Number
  - \* Ink or Laser Marking available



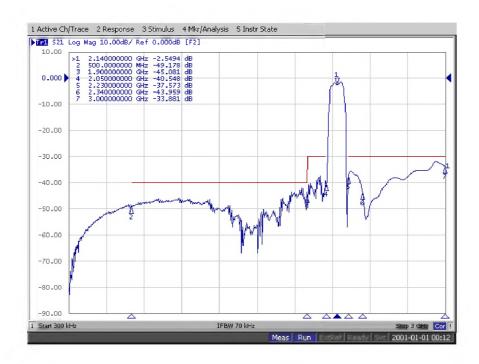
#### Typical Performance (at 25℃)





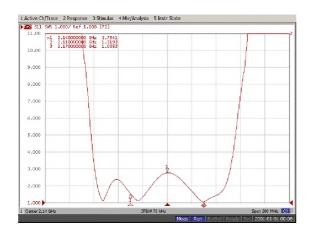


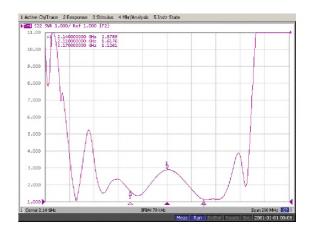
### Typical Performance (at 25℃)



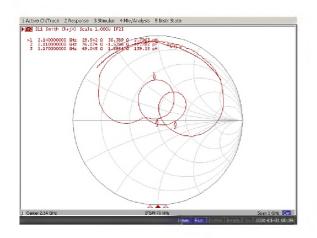


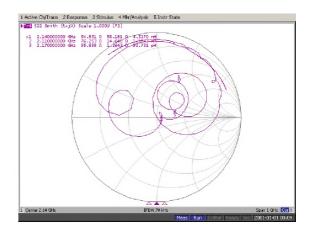
#### **Input / Output VSWR Charts**





#### **Input / Output Smith Charts**



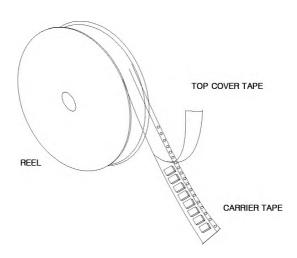




#### **Packing Specification**

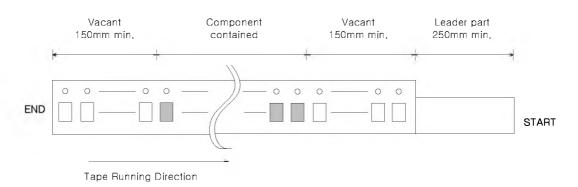
1. Reeling Quantity: 1000 pcs / reel

2. Taping Structure: The tape shall be wound around the reel in the direction shown below.



### **Tape Specification**

1. Leader part and vacant position specification



2. Tensile strength of carrier tape

4.4N/mm width

Direction of pull

3. Top cover tape adhesion

1) pull off angle : 0~15°

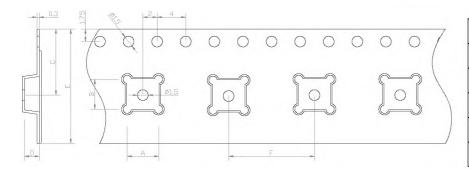
2) speed : 300mm/min

3) force : 20~70g

Carrier tape

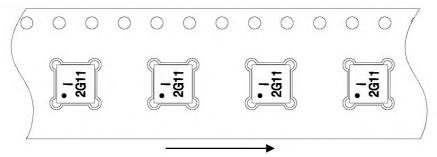


### **Carrier Tape Dimensions** [unit: mm]



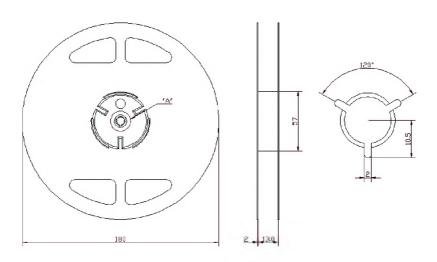
797	
A	$3.40 \pm 0.1$
В	$3.40 \pm 0.1$
С	$7.25 \pm 0.1$
D	$1.70 \pm 0.1$
Е	$12.00 \pm 0.1$
F	$8.00 \pm 0.1$

#### **Part Direction**



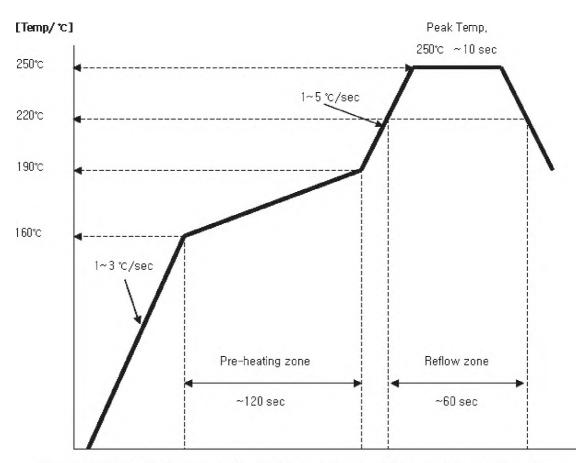
Tape Running Direction

### **Reel Dimensions** [unit: mm]





#### **Reflow Condition**



Comment) The quality is guaranteed under this temperature conditions on 2 times solder reflows

#### **Cautions**

1. This is a hermetic device.

MSL (Moisture Sensitive Level) is the 1st level

2. This is an electrostatic sensitive device. Please avoid static voltage during operation and storage.

ESD (Electrostatic Discharge ) Rating is class 0. (Test: HBM-Human Body Model)

- 3. Ultrasonic cleaning shall be avoided.
- 4. This device should not be used in any type of fluid such as water, oil, organic solvent, etc.

### Manual soldering process

- approximately 350 °C in 15 to 20 seconds to be completed