

1. Features

- RF SAW Band Pass Filter
- Usable Pass-band 12.0 MHz
- No matching 50Ω single-ended operation
- Ceramic Surface Mount Device(SMD) Package
- RoHS/RoHS2 (2015/863/EU) Compliant

RoHS Compliant

Tested by SGS Testing Korea

2. Electrical Specifications

Source and Load Impedance = 50Ω

Room Temperature : +25 °C			Minimum	Typical	Maximum
Center Frequency (fo)		MHz	-	408.0	-
Insertion Loss	402.0 MHz ~ 414.0 MHz	dB	-	3.3	4.0
Amplitude Ripple	402.0 MHz ~ 414.0 MHz	dB	-	2.0	2.8
Relative Attenuation					
0.3 MHz ~ 392.0 MHz		dB	30	33	-
417.0 MHz ~ 418.0 MHz		dB	7	15	-
418.0 MHz ~ 1500.0 MHz		dB	25	30	-

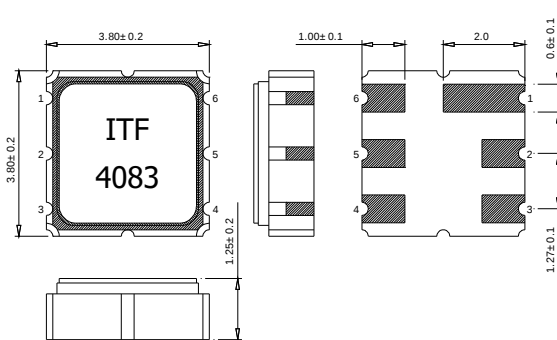
Notes :

- 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

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	+25	+85
Storage Temperature Range	°C	-40	+25	+85
Power Handling Capability	dBm	-	-	10

S3838 Package Dimension



Marking Configuration

ITF¹⁾
4083²⁾

1) Manufacturer name

2) Marking Number

* Ink or Laser Marking available

Dimensions shown are nominal in millimeters

Body : Al₂O₃ Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 um, Over a 1.27 ~ 8.89 um Ni Plating

Matching Schematic



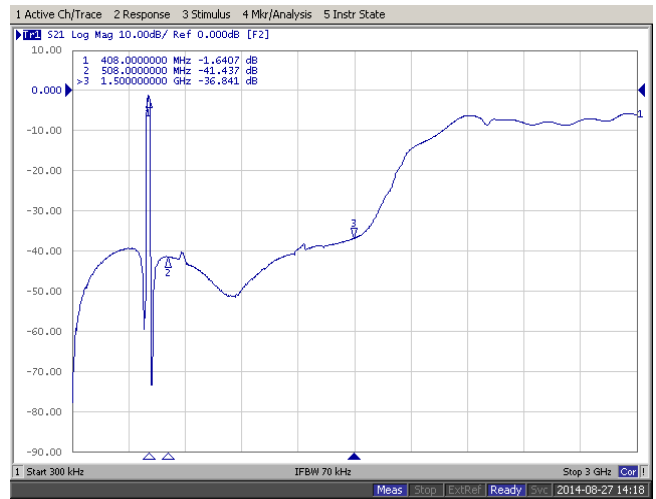
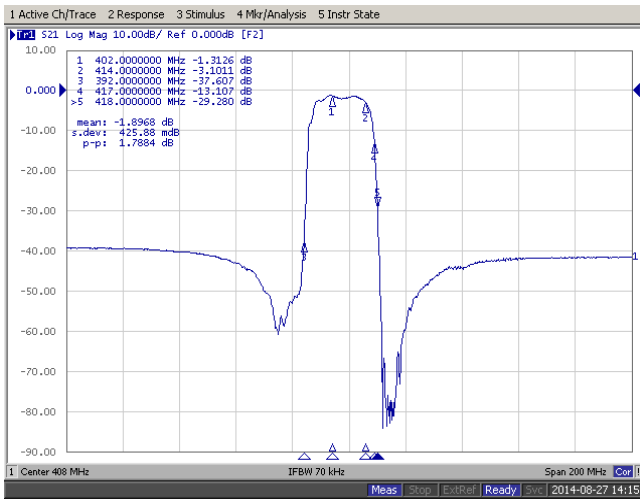
Pin Configuration			
Input	2	Others	Ground
Output	5		

Due to variances in a PCB layout and parasitics, actual matching values may have to be changed accordingly.

3. Typical Performance (at +25°C)

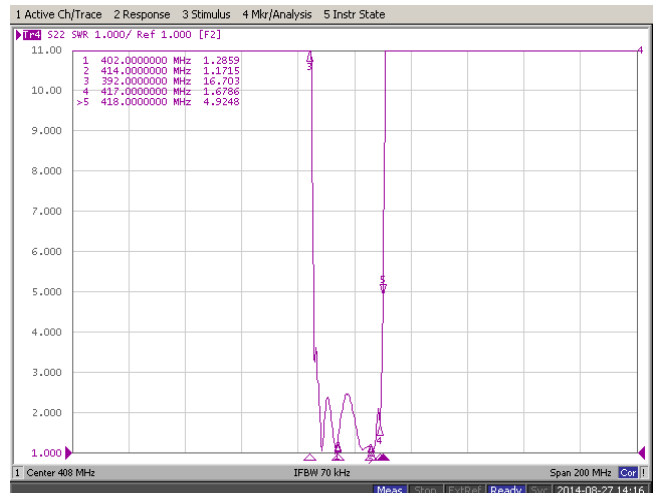
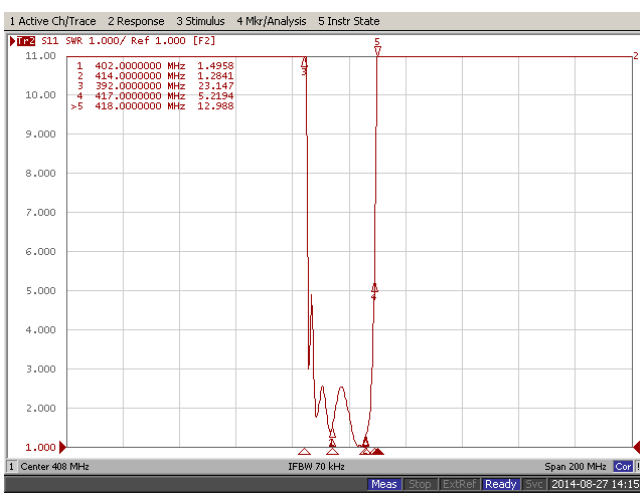
10dB Scale (Insertion Loss & Ripple)

Wideband Properties



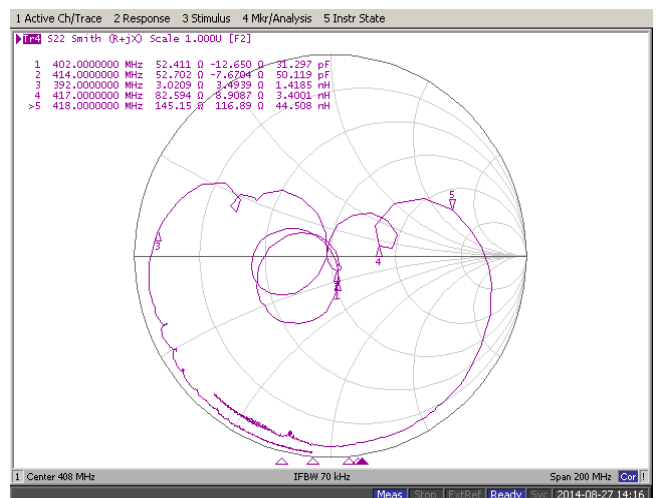
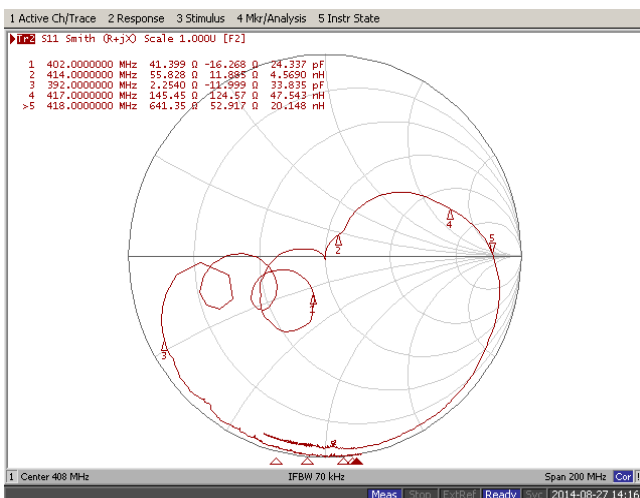
VSWR (S11)

VSWR (S22)



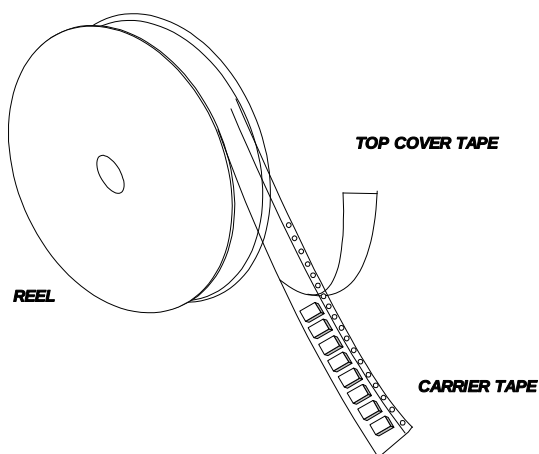
Smith Chart (S11)

Smith Chart (S22)



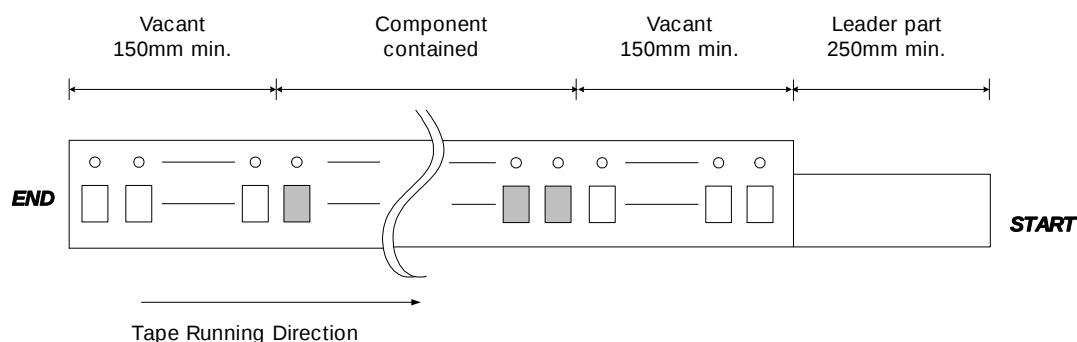
4. Packing Specification

1. Reeling Quantity : 3000 pcs / 13" reel (or 1000 pcs / 7" reel)
2. Taping Structure : The tape shall be wound around the reel in the direction shown below.



5. Tape Specification

1. Leader part and vacant position specification

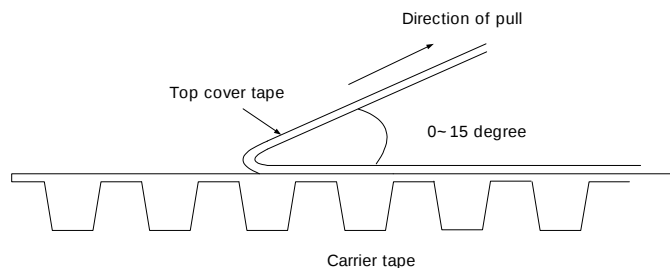


2. Tensile strength of carrier tape

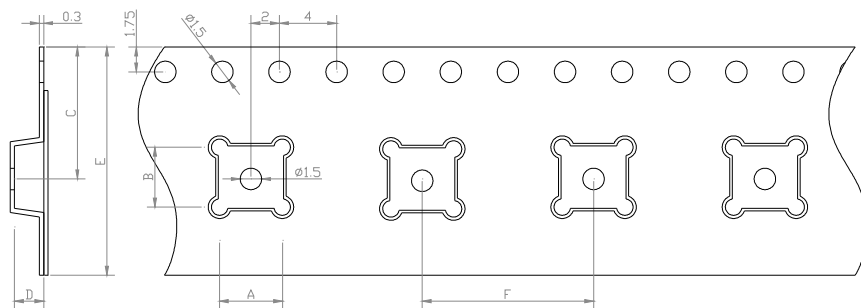
4.4N/mm width

3. Top cover tape adhesion

- 1) pull off angle : 0~15°
- 2) speed : 300mm/min
- 3) force : 20~70g

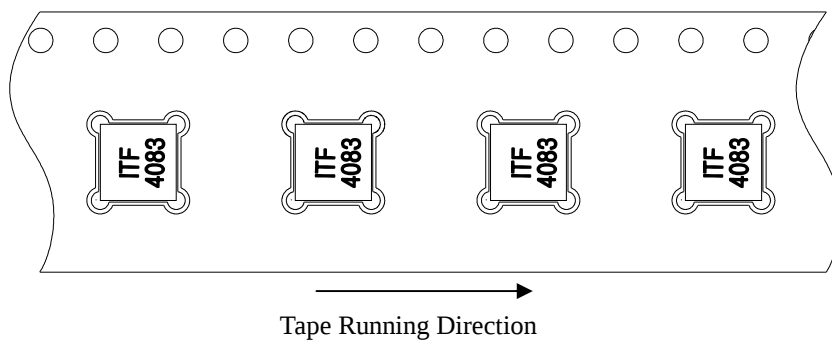


6. Carrier Tape Dimensions [unit : mm]



A	4.30 ± 0.1
B	4.30 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

7. Part Direction



8. Reel Dimensions [unit : mm]

