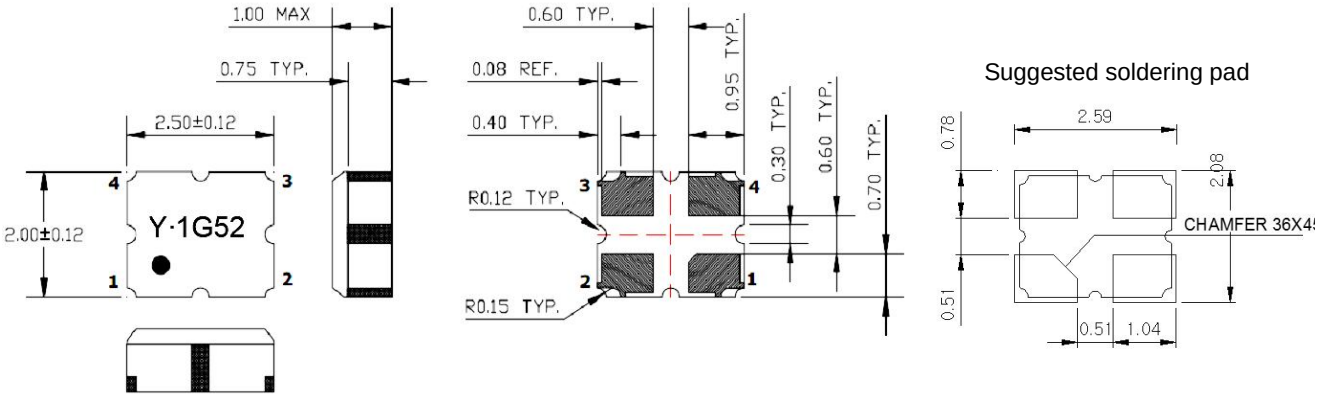
1575.42 MHz SAW Bandpass Filter KX-SF

Part no. 12.98600

Features

- GPS application
- Usable bandwidth of 2 MHz
- No matching 50Ω single-ended operation
- SMD Package (2.5 x 2.0 x 1.0 mm)

Package dimensions



Dimensions shown are nominal in millimeters
Body : Al_2O_3 Ceramic
Lid: Kovar, Ni Plated
Terminations : Au plating 0.3 ~ 1.0 um,
Over a 2.0 ~ 6.0 um
Ni Plating

Pin Configuration	
1	Input
3	Output
2, 4	Output

Maximum ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating temperature range	℃	-40	25	95
Storage temperature range	℃	-40	-	105
Power handling capability	dBm	-	-	-

Electrostatics Sensitive Device (ESD)

Specifications

Fc = 1575.42 MHz
Terminating source impedance: 50Ω
Terminating load impedance: 50Ω

	Unit	Minimum	Typical	Maximum
Center frequency (Fc)	MHz	-	1575.42	-
Insertion loss (Fo ± 1 MHz)	dB	-	1.5	2.2
Amplitude Ripple (Fo ± 1 MHz)	dBp-p	-	0.1	1.0
Relative Attenuation: D.C. ~ 1400 MHz 1400 ~ 1475 MHz 1475 ~ 1525 MHz 1625 ~ 1640 MHz 1640 ~ 2000 MHz 2000 ~ 3000 MHz	dB	 35 30 25 30 32 20	 37 34 37 45 34 28	 - - - - - -
VSWR (1574.42 ~ 1576.42 MHz)	-	-	1.2	2.0

Notes:

1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full-2 port calibration.

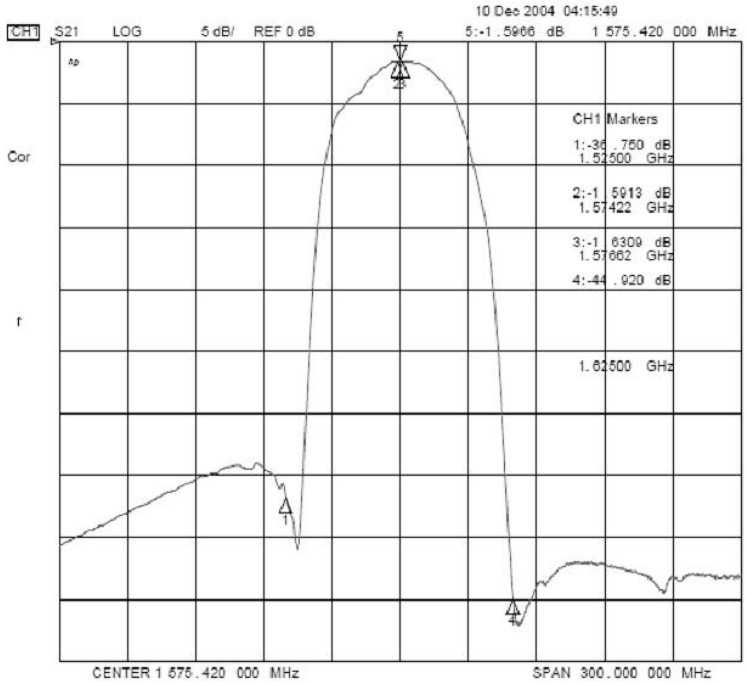
2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances

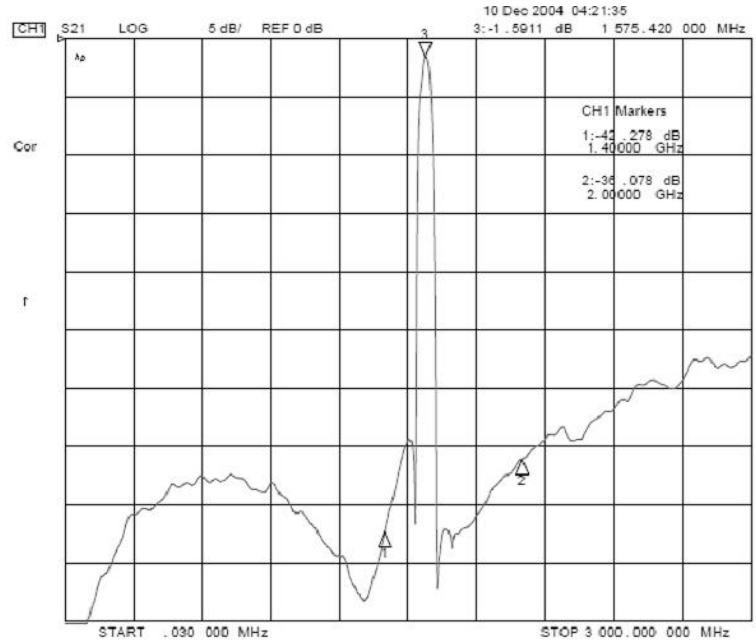
3. All attenuation measurements are measured relative to insertion loss.

Matching schematic

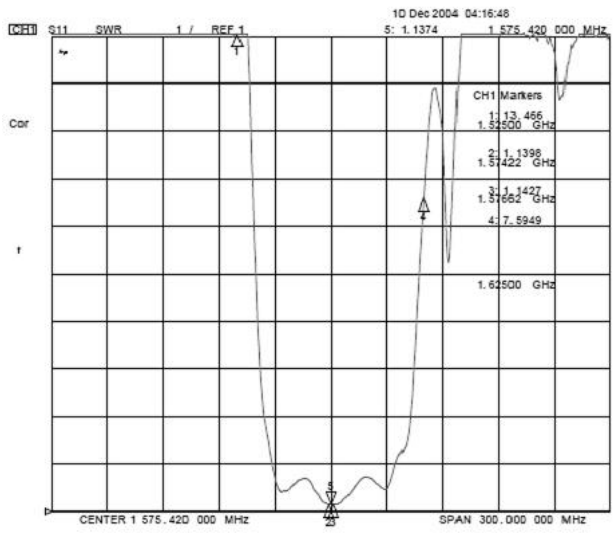
(Actual matching values may vary due to PCB layout and parasitic)

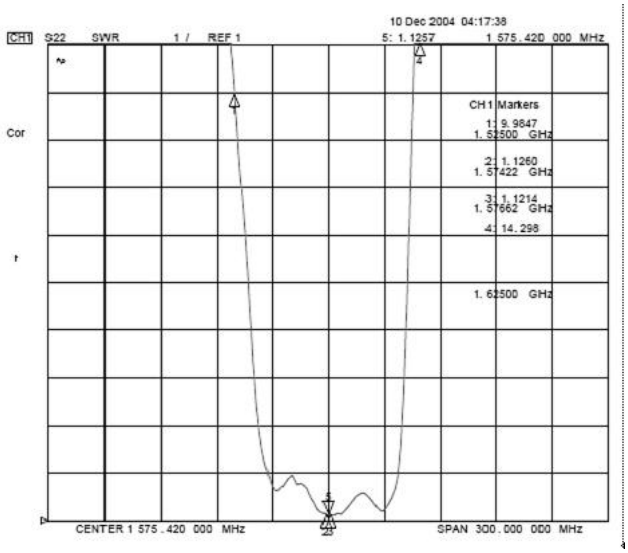
Typical Performance (at 25°C)



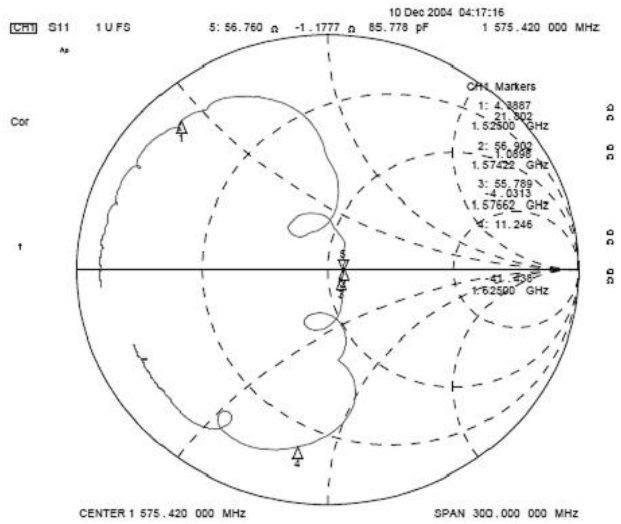


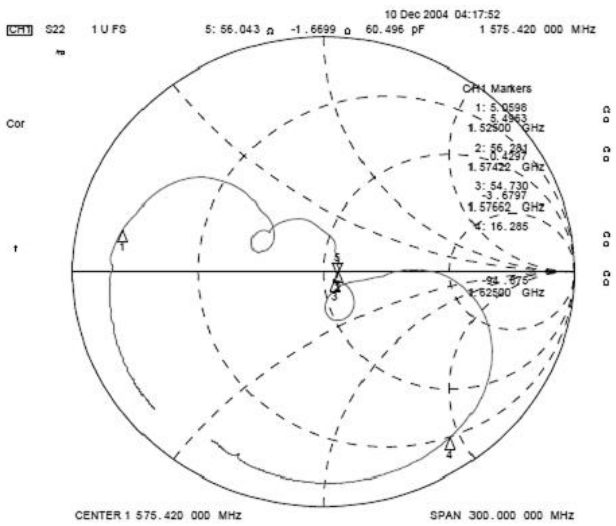
Input / Output VSWR charts





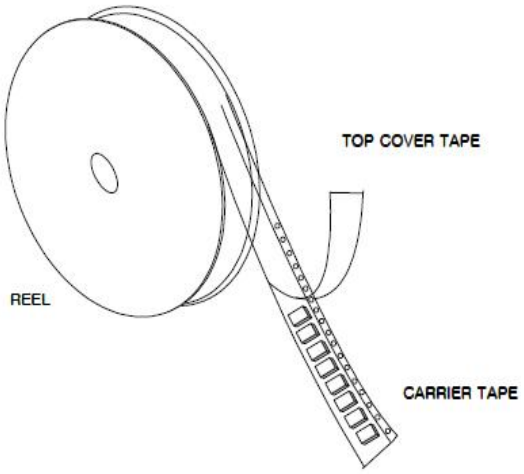
Input / Output Smith charts





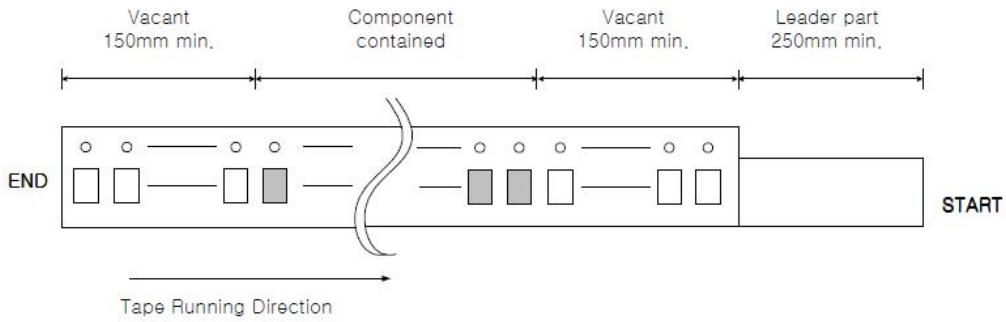
Packing Specification

1. Reeling Quantity : 3,000 pcs / reel (or 1,000 pcs / reel, 2,000 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

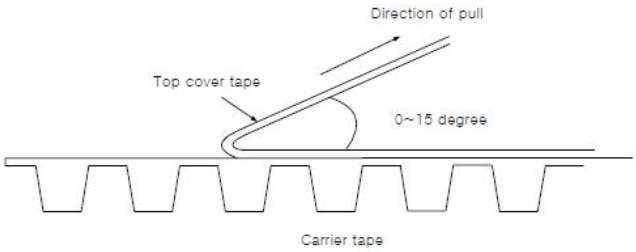
   4.4N/mm width

3. Top cover tape adhesion

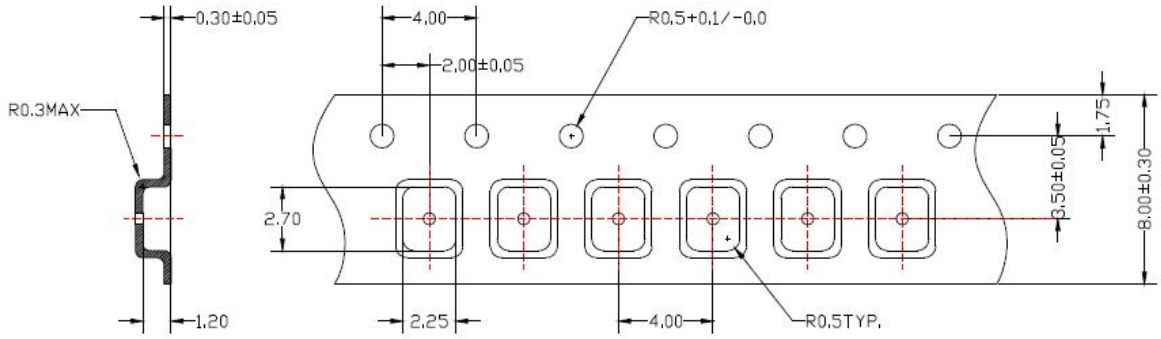
   1) pull off angle : 0~15°

   2) speed : 300mm/min

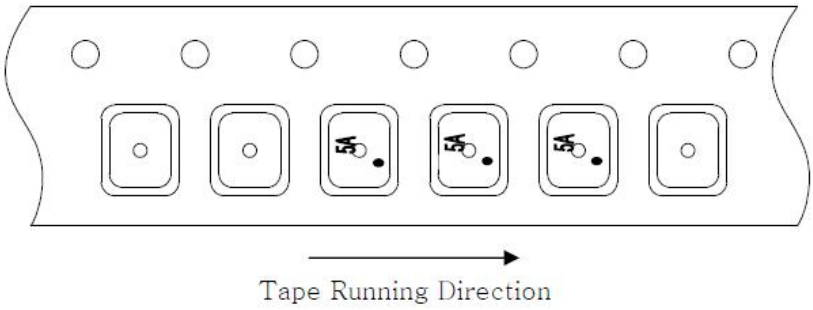
   3) force : 20~70g



Carrier Tape Dimensions [unit : mm]



Part Direction



Reel Dimensions [unit : mm]