

# P/N : HD34391 MEMS BAND PASS FILTER

#### Features:

- Pass Band : 8.6G~ 10.0GHz
- Insertion Loss : 3.0dB
- Size : 13.65x5.0x0.5mm

#### Absolute Maximum Ratings

- Max. Input Power : +35dBm
- Storage Temperature : -55 ~ +85Deg.C
- Operating Temperature : -55 ~ +125Deg.C

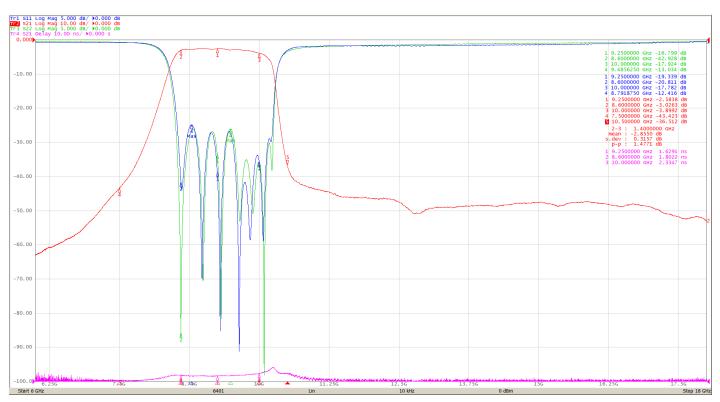
# A

#### ELECTROSTATIC SENSITIVE DEVICE OBSERVE HANDLING PRECAUTIONS

### Electrical Specifications (T<sub>A</sub>=+25Deg.C, 50Ω system)

Parameter		Min.Value	Typical Value	Max.Value	Unit
Frequency Range		8.6 ~ 10.0			GHz
Insertion Loss (Fc)			2.58	3.0	dB
Ripple			1.47	2.0	dB
Attenuation	DC~@7.5GHz	40	43.42	-	dB
	@10.5GHz	30	36.51	-	dB
Return Loss		12.0	12.41	-	dB
Group Delay			2.31	4.0	ns

## Test Curve





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#### <u>Size</u>

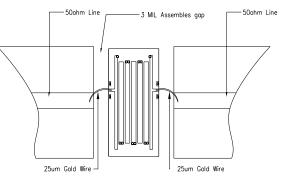


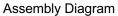
Remarks:Unit : mm, Tolerance : ±0.25mm

- 1. Chip bottom is gold plated and grounded.
- 2. Bonding pressure points are gold plated.
- 3. Don't bond on the through holes.

#### **Applications**

1. Assembly and Bonding Diagram. (Reference)





- 2. The chip is back-metalized and can be die mounted with AuSn eutectic performs or with electrically conductive epoxy (for example ME8456).
- 3. The die should be assembled on carriers like Kovar or Mu-Cu which have same Coefficient of thermal expansion. (2.9ppm/°C) with Silicon, thickness 0.2mm max.
- 4. Handle the chips in a clean environment. DO NOT attempt to clean the chip using liquid cleaning systems.
- 5. Handle the chip along the edges with a vacuum collet or with a sharp pair of bent tweezers.