

#### HD34387

## **MEMS Band Pass Filter**

#### Features:

- Pass Band : 2.6G~ 4.0 GHz
- Insertion Loss : 3.0dB
- Size : 7.67x11.0x0.5mm

#### **Absolute Maximum Ratings**

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



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		2.6 ~ 4.0			GHz
Insertion Loss (Fc)		-	2.58	3.0	dB
Ripple		-	0.92	1.3	dB
Attenuation	DC~@2GHz	30.0	31.48	-	dB
	@4.5GHz ~ 8GHz	30.0	37.26	-	dB
Return Loss		15.0	15.77	-	dB
Group Delay		-	2.20	4.0	ns



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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.



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#### Applications

1. Assembly and Bonding Diagram. (Reference)



Assembly Diagram

- 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.