

# P/N: HD34389 MEMS BAND PASS FILTER

### Features:

■ Pass Band : 2.0 ~ 6.0 GHz ■ Insertion Loss : 4.5dB ■ Size : 7.5x20.0x0.5mm

#### **Absolute Maximum Ratings**

■ Max. Input Power: +35dBm

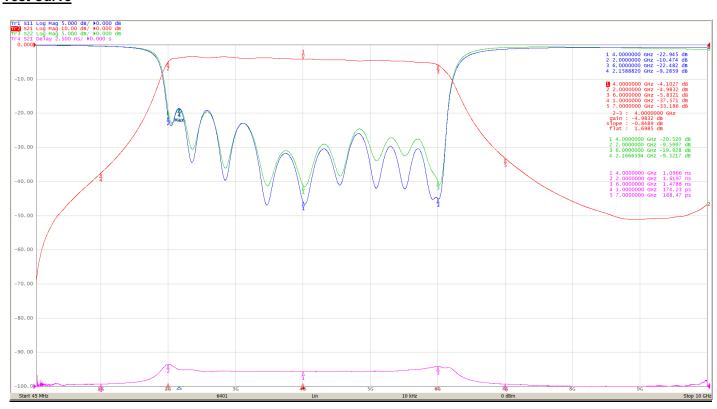
■ Storage Temperature : -55 ~ +85Deg.C ■ Operating Temperature : -55 ~ +125Deg.C



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

Parameter		Min.Value	Typical Value	Max.Value	Unit
Frequency Range		2.0~6.0			GHz
Insertion Loss		-	4.10	4.5	dB
Ripple		-	1.69	2.0	dB
Attenuation	DC~@1GHz	30	37.57	-	dB
	@7.0GHz	30	33.18	-	dB
Return Loss		7.5	9.0	-	dB
Group Delay		-	1.61	2.5	ns

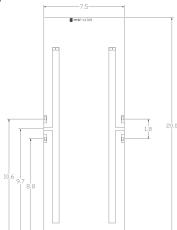
#### **Test Curve**





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

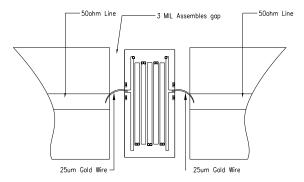


Remarks:Unit: mm, Tolerance: ±0.25mm

- 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)



**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.