H Series

TRADITIONAL Pb RoHS COMPLIANT

TTE Designs

Frequency Range from 100 Hz to 200 MHz

Application-Specific Designs

SERIES NUMBER	NUMBER OF POLES	INSERTION LOSS at 5.0 x f_{-3dBc} dB MAXIMUM	STOPBAND ATTENUATION dBc MINIMUM	STOPBAND FREQUENCY
FREQUENCY $_{-3dBc}$ – 100 Hz to 200 MHz – specify any f within that range				
H83	9	0.5	-40	0.75 x f_{-3dBc}
H93	11	0.5	-40	0.80 x f_{-3dBc}
H73	7	0.5	-60	0.45 x f_{-3dBc}
H87	9	0.5	-60	0.65 x f_{-3dBc}
H97	11	0.5	-60	0.70 x f_{-3dBc}

Note: TTE's products are made in the USA. Application-specific designs are made to order. Typical delivery is 2 weeks. Expedited lead time of 3-5 days is available on many products.

For RoHS compliant, add "R" to part number. Example: H87R-5M-50-65B

TTE designates a component RoHS-compliant by adding "R" (RoHS) within the part number.

These RoHS components meet the ≤ 0.1% lead requirement and they are compatible with 260°C soldering processes.

NOTES:

- Operating Temperature Range: 0°C to +70°C
- Number of Poles: 7, 9 or 11
- VSWR: 1.5:1 Typical
- Input Power: 20 mW
- Case Type: Refer to **Case Selection Guide**
- Case Options: PCB, SMT, BNC or SMA
- Normalized Response: Refer to **Graphs**
- Product Info: Refer to **H Series**

TERMINATIONS:

50 Ω	100 MHz - 200 MHz
50 Ω or 75 Ω	300 kHz - 100 MHz
1 kΩ - 50 Ω	10 kHz - 300 kHz
10 kΩ - 1 kΩ	100 Hz - 10 kHz

STOPBAND FREQUENCY CALCULATIONS:

Using part number H87-5M-50-65B, we know that the filter is a 9 pole TTE-designed highpass filter. Scroll down to series number H87. Moving to the right we find the stopband specification listed as -60dBc minimum at 0.65 x f_{-3dBc}. Thus, the -60dBc frequency is at 3.25 MHz (0.65 x 5 MHz).

PART NUMBER DERIVATION:

H87	*(T)	**(R)	-5M	-50	-65B
1	2	3	4	5	6

1) Series, H87 (which has 9 poles)

*2) The "T" option specifies a filter with low THD for ADC/DAC testing. When selected the minimum THD is > -80dBc, -96dBc typical. Testing requires a bandpass filter.

**3) "R" RoHS compliant. Allow for longer lead time.

4) f_{-3dBc}

5) Terminations

6) Case selection from the case selection guide. "T" option cases are larger than standard.