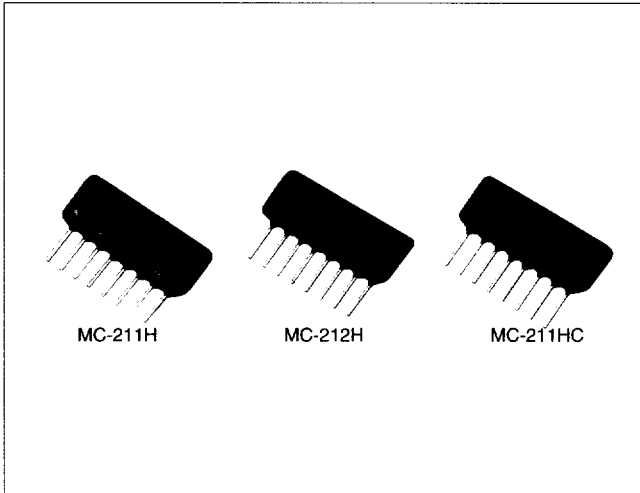


# Coil Components (Hybrid)

## MC-H Series



### ■ Features

#### 1. Excellent High Frequency Characteristics

The use of coils made with a special winding method based on a lumped-constant design provide a high degree of matching, low loss, and high isolation.

#### 2. VE Design

The VE design packaging has been given a powder coating.

### ■ Product Specifications

Rating	Frequency range (NOTE) Characteristic impedance (NOTE) Maximum usable power	60 to 390 MHz 50 Ω, 75 Ω 0.5 W	Operating temperature range Operating relative humidity	-10°C to +65°C 95% or less
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NOTE: The frequency range and the characteristic impedance will differ depending on the model.

Item	Standard	Conditions
1. Vibration resistance	No damage, cracks, or parts looseness	Frequency of 10 to 2000 Hz, overall amplitude of 1.5 mm, 98 m/s <sup>2</sup> acceleration, in 3 axial directions 4 hours each
2. Shock resistance	No damage, cracks, or parts looseness	294 m/s <sup>2</sup> acceleration, half sine wave, in 3 axial directions, 3 times each
3. Temperature cycle	No damage, cracks, or parts looseness	(-35°C: 30 min. → 5 to 35°C: Within 15 min. → 85°C: 30 min. → 5 to 35°C: Within 15 min.) for 5 cycles

● The test method conforms to MIL-STD-883.

### ■ Materials

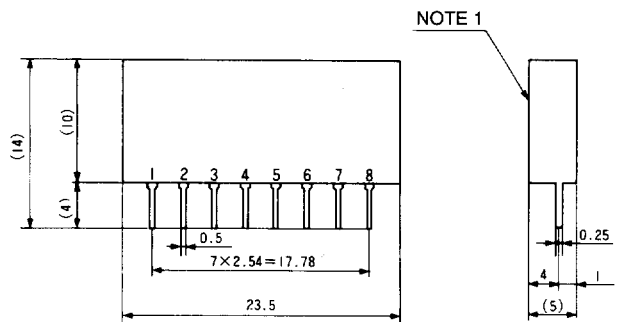
Part	Material	Processing
External Cladding	Resin	—
Contacts	Phosphor bronze	Solder plating
Board	Dielectric	Solder plating

### ■ Product Number Breakdown

**MC - 2 1 1 H**  
 ① ② ③ ④ ⑤

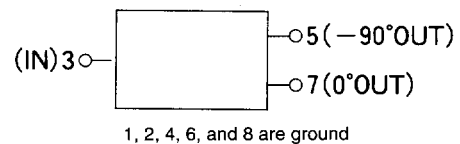
① Series Name: MC	④ Suffix
② Number of Divisions Indicated by number of divisions of output. 2: 2 divisions	⑤ Form of Case H: Hybrid
③ Phase Difference Indicated by phase difference of output. 1: 90°	

### ■ External Dimensions



NOTE 1: The surface is textured for HIC.

### ■ Function Diagram



## Specifications

Model No.	(MHz) Frequency Range	(deg) Phase Difference	(dB Max) * above 3dB Insertion Loss	(dB Min) True Insertion Loss	(dB Min) Isolation	V.S.W.R. (Max)	Balance		(Ω) Impedance	(g) Weight
							(deg) Phase	(dB) Amplitude		
MC-211H	350~390	-90	1.4	4.9	18	1.4	±3	±0.5	50	2
MC-212H	290~300	-90	1.4	4.9	18	1.4	±5	±0.5	50	2
MC-213H	210~230	-90	1.4	4.9	18	1.4	±5	±0.5	50	2
MC-211HC	130~150	-90	1.4	4.9	18	1.4	±3	±0.5	75	2
MC-212HC	60~80	-90	1.4	4.9	18	1.4	±5	±0.5	75	2

\*The insertion loss of the 2-way 90° type is the average output of the 0° port and the -90° port minus 3 dB coupling.

## Typical Data

