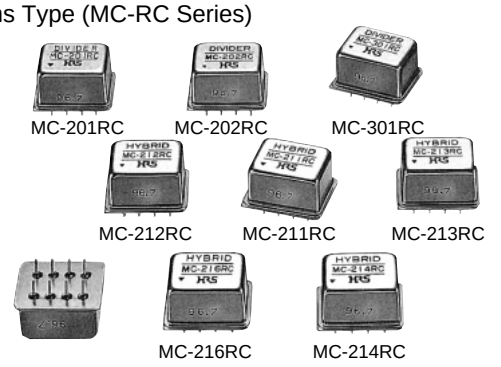
Coil Components (Relay Headers)

MC-R and MC-RC Series

75 ohms Type (MC-RC Series)



MC-201RC MC-202RC MC-301RC

MC-212RC MC-211RC MC-213RC

MC-216RC MC-214RC

50 ohms Type (MC-R Series)



MC-201R MC-212R MC-213R

■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.Highly Reliable Design

The metal case is designed with a hermetically sealed construction which contains inert gas. This permits quality to be maintained over a long period.

3.Easy Soldering

The pre-soldering leads give easy soldering operations.

4.Prevention of Flux Creepage

Use of the supplied Teflon sheet permits the prevention of solder flux creepage.

■Product Specifications

Ratings	Frequency range (Note) Characteristic impedance (Note) Maximum Input Power	30 to 200 MHz 50 ohms, 75 ohms 0.5 W	Operating temperature range Operating relative humidity	-10℃ to +65℃ 95% Max.

Note: The frequency range and the characteristic impedance will differ depending on the products.

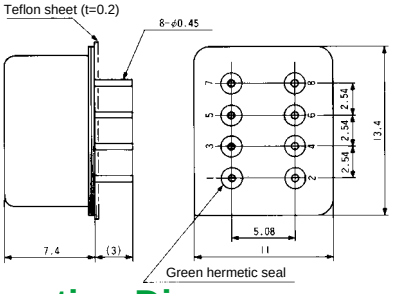
Item	Standard	Conditions
1.Vibration	No damage, cracks, or parts dislocation	Frequency of 10 to 2000 Hz, overall amplitude of 1.5 mm, acceleration of 98 m/s² for 4 hours in each of 3 directions
2.Shock		Acceleration of 294 m/s², sine half-wave waveform, 3 cycles in each of the 3 axis
3.Temperature cycle		Temperature: -35℃ → +5℃ to +35℃ → +85℃ → +5℃ to +35℃ Time: 30 → 15 max. → 30 → 15 max. (Minutes) 5 cycles

●The test method conforms to MIL-STD-202.

■Materials

Part	Material	Finish
Board	Iron	Nickel plating
Contacts	Iron-nickel alloy	Solder dip
Hermetic seal	Glass	——

■External Dimensions

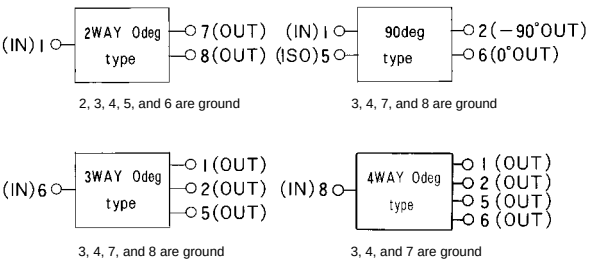


■Ordering Information

MC - 2 0 1 R C
❶ ❷ ❸ ❹ ❺ ❻

❶Series Name: MC	❹Suffix
❷Number of Divisions Indicated by number of divisions of output.	❺Form of Case R: Relay header
❸Phase Difference Indicated by phase difference of output. 0 : 0° 1 : 90°	❻Characteristic Impedance C : 75Ω Blank : 50Ω

■Function Diagram



■Specifications

2WAY 0°deg type (POWER COMBINERS AND SPLITTERS)

Part Number	Frequency Range (MHZ)	Phase Difference (deg)	above 3dB Insertion Loss (dB Max)	True Insertion Loss (dB Min)	Isolation (dB Min)	V.S.W.R. (Max)	Balance		Impedance (ohms)	Weight (g)
							Phase (deg)	Amplitude (dB)		
MC-201RC	30～200	0	0.6	3.6	25	1.3	±3	±0.1	75	3
MC-202RC	100～180	0	0.6	3.6	30	1.15	±3	±0.1	75	3
MC-201R	30～200	0	0.6	3.6	25	1.3	±3	±0.1	50	3

3WAY 0°deg type (POWER COMBINERS AND SPLITTERS)

Part Number	Frequency Range (MHZ)	Phase Difference (deg)	above 3dB Insertion Loss (dB Max)	True Insertion Loss (dB Min)	Isolation (dB Min)	V.S.W.R. (Max)	Balance		Impedance (ohms)	Weight (g)
							Phase (deg)	Amplitude (dB)		
MC-301RC	40～160	0	0.7	5.5	25	1.3	±3	±0.2	75	3
MC-302RC	100～180	0	0.7	5.5	25	1.2	±3	±0.2	75	3

2WAY 90° deg type (POWER COMBINERS AND SPLITTERS)

Part Number	Frequency Range (MHZ)	Phase Difference (deg)	※ above 3dB Insertion Loss (dB Max)	True Insertion Loss (dB Min)	Isolation (dB Min)	V.S.W.R. (Max)	Balance		Impedance (ohms)	Weight (g)
							Phase (deg)	Amplitude (dB)		
MC-212RC	50～95	−90	0.6	3.85	25	1.2	±3	±0.5	75	3
MC-211RC	110～170	−90	0.7	3.85	25	1.2	±3	±0.5	75	3
MC-213RC	100～120	−90	0.7	3.85	20	1.2	±3	±0.5	75	3
MC-215RC	120～140	−90	0.7	3.85	20	1.2	±3	±0.5	75	3
MC-216RC	140～160	−90	0.7	3.85	20	1.2	±3	±0.5	75	3
MC-214RC	160～180	−90	0.8	3.95	20	1.2	±3	±0.5	75	3
MC-212R	50～95	−90	0.6	3.85	25	1.2	±3	±0.5	50	3
MC-213R	110～170	−90	0.7	3.85	25	1.2	±3	±0.5	50	3

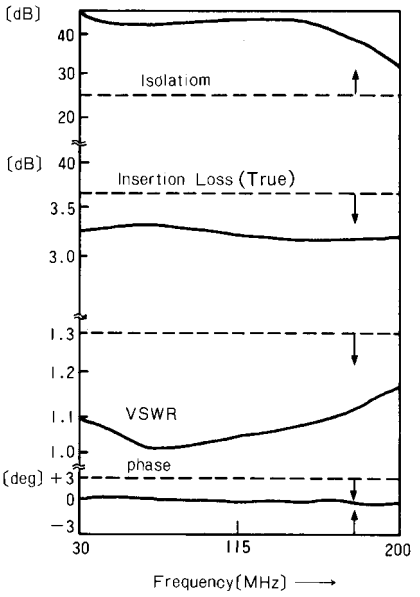
※The insertion loss of the 2-way 90° type is the average output of the 0° port and the -90° port minus 3 dB coupling.

4WAY 0° deg type (POWER COMBINERS AND SPLITTERS)

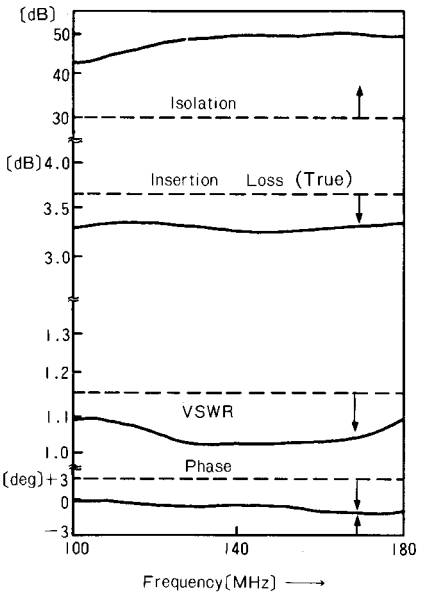
Part Number	Frequency Range (MHZ)	Phase Difference (deg)	above 3dB Insertion Loss (dB Max)	True Insertion Loss (dB Min)	Isolation (dB Min)	V.S.W.R. (Max)	Balance		Impedance (ohms)	Weight (g)
							Phase (deg)	Amplitude (dB)		
MC-401RC	40～180	0	0.8	6.8	20	1.3	±3	±0.2	75	3

■Typical Data

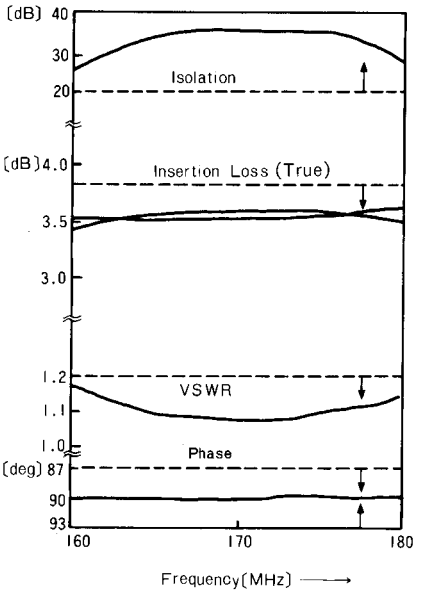
MC-201RC



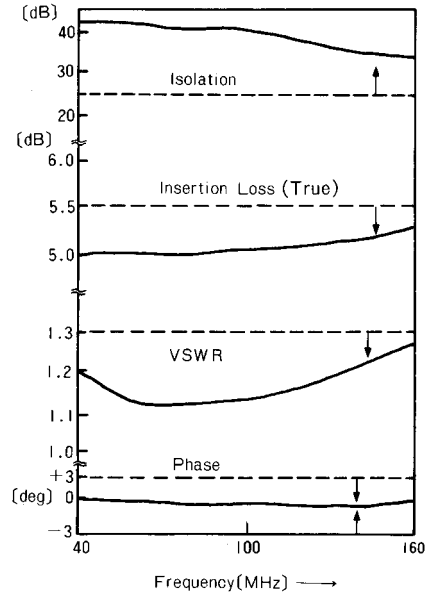
MC-202RC



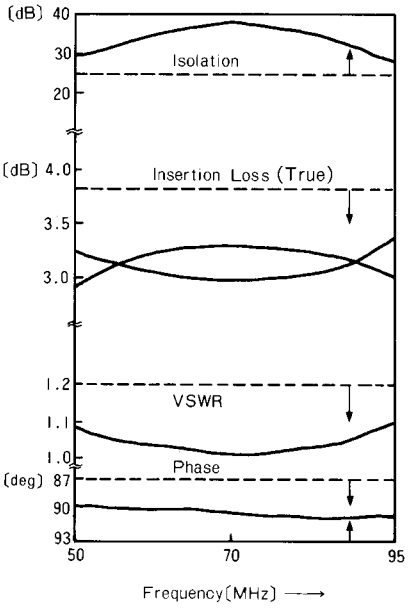
MC-214RC



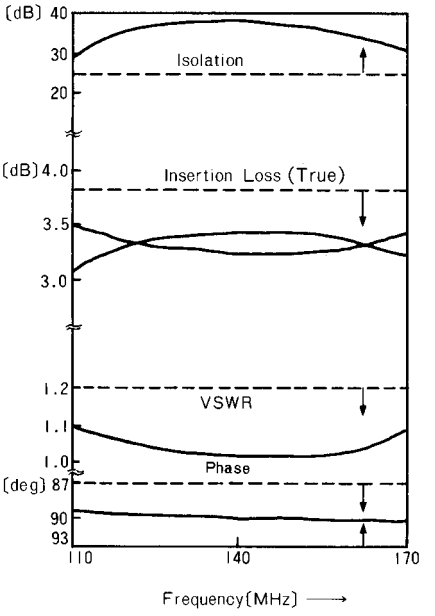
MC-301RC



MC-212RC

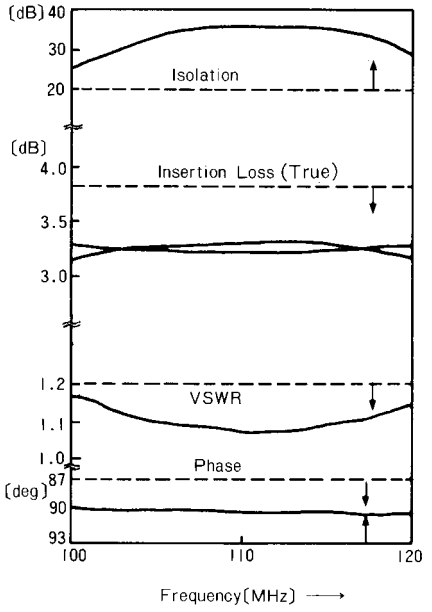


MC-211RC

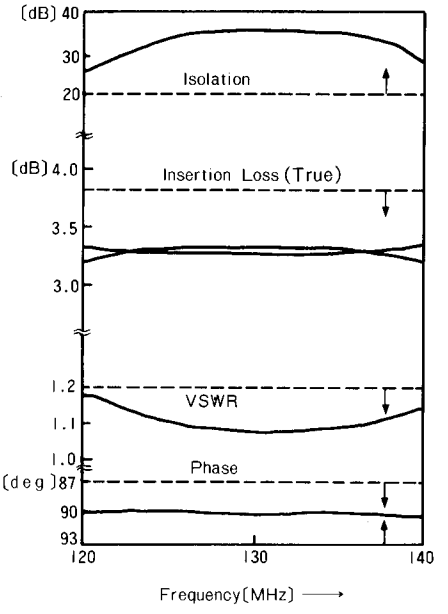


■Typical Data

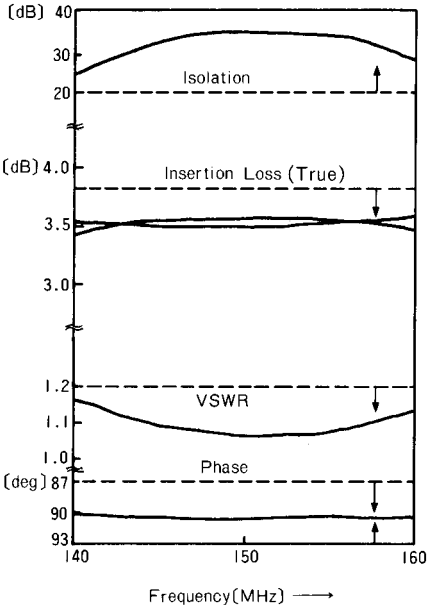
MC-213RC



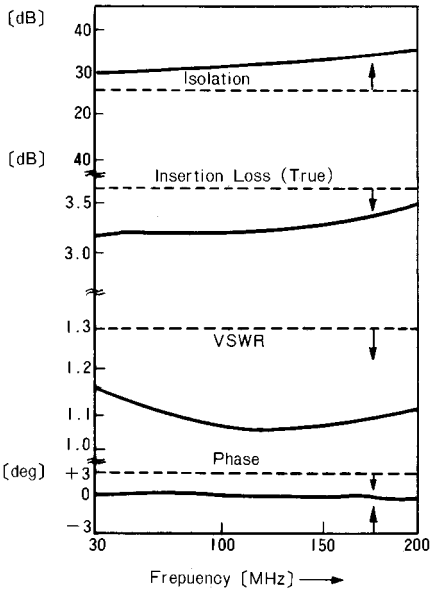
MC-215RC



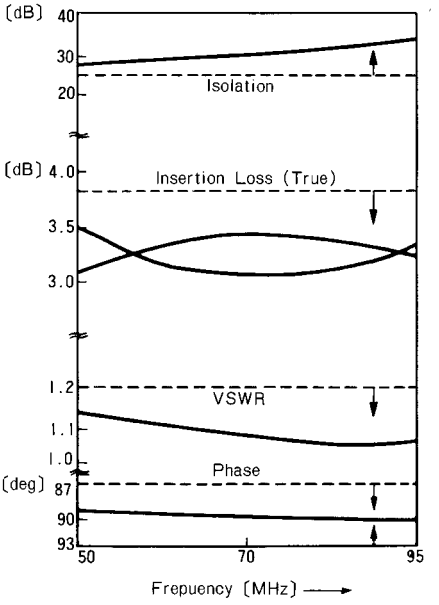
MC-216RC



MC-201R



MC-212R



MC-213R

