

MICROWAVE COMPONENTS

0.5 to 14.5GHz	3dB Coaxial Hybrids	CL 352
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◆ GENERAL FEATURES

The 3 dB Coaxial Hybrids are used as components for combining and distributing power in oscillators, radar, transmission and radio equipment. The case is made of corrosion-resistant aluminum, the device is light and compact, and use of the HRM (SMA) type stainless steel connector ensures high performance.

Incorporation of the stripline triplate method into the design yields superior environmental resistance, and the electrical characteristics are excellent.

The input signal is divided into two output signals, such that one has a phase of 0° and the other a phase of 90°.

◆ MATERIAL·FINISH

Part name	Material	Finish
Connector body	Stainless steel	Passivated
Connector contact (Female)	Beryllium copper	Gold plated
Connector insulator	Teflon	
Case	Aluminum	
P.C. Board	Dielectric	Gold plated

◆ OPERATIONAL ENVIRONMENT

Operating temperature; $-10^{\circ}\text{C}\sim+65^{\circ}\text{C}$

Humidity; 0~95%

◆ TEST ENVIRONMENT

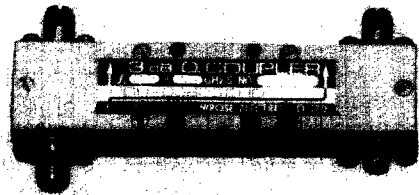
Vibration resistance; 10~55Hz

Total amplitude; 1.5mm 55~2000Hz 98m/s²

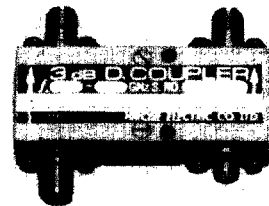
Temperature resistance; $-55^{\circ}\text{C}\sim+80^{\circ}\text{C}$

Impulse resistance; 490m/s²

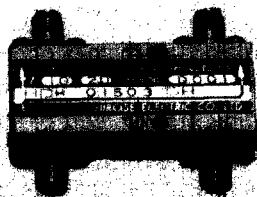
Testing Method per MIL-STD-202



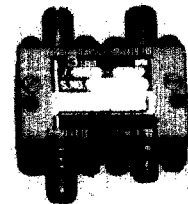
HDH-00803GHD



HDH-01503GHD



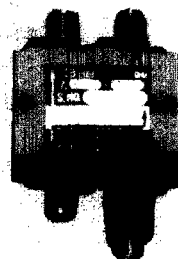
HDH-01503GH



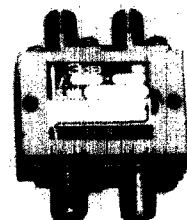
HDH-03003GHD



HDH-06003GHD



HDH-09003GHD



HDH-12803CHD

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◆ SPECIFICATIONS

Model No.	Frequency Range (GHz)	Coupling (dB)	Frequency Sensitivity (dB)	Directivity (dB Min)	Primary Line VSWR (Max)	Secondary Line VSWR (Max)	Weight (g)	Power (W)
HDH-00803GHD	0.5 ~ 1.0	$3 \begin{smallmatrix} -0.2 \\ 0 \end{smallmatrix}$	±0.5	20	1.15	1.15	49	2
HDH-01503GH	1.0 ~ 2.0	$3 \begin{smallmatrix} -0.2 \\ 0 \end{smallmatrix}$	±0.5	20	1.20	1.20	34	50
HDH-01503GHD	1.0 ~ 2.0	$3 \begin{smallmatrix} -0.2 \\ 0 \end{smallmatrix}$	±0.5	20	1.20	1.20	34	2
HDH-01703CH	1.5 ~ 1.9	$3 \begin{smallmatrix} -0.2 \\ 0 \end{smallmatrix}$	±0.3	20	1.20	1.20	34	50
HDH-01703CHD	1.5 ~ 1.9	$3 \begin{smallmatrix} -0.2 \\ 0 \end{smallmatrix}$	±0.3	20	1.20	1.20	34	2
HDH-02003DHD	1.7 ~ 2.3	$3 \begin{smallmatrix} -0.2 \\ 0 \end{smallmatrix}$	±0.3	18	1.20	1.20	34	2
HDH-03003GHD	2.0 ~ 4.0	$3 \begin{smallmatrix} -0.2 \\ 0 \end{smallmatrix}$	±0.5	18	1.20	1.20	25	2
HDH-04003BH	3.7 ~ 4.2	$3 \begin{smallmatrix} -0.2 \\ 0 \end{smallmatrix}$	±0.3	20	1.20	1.20	23	50
HDH-06003GHD	4.0 ~ 7.8	$3 \begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	±0.5	17	1.25	1.25	23	2
HDH-09003GHD	8.0 ~ 11.0	$3 \begin{smallmatrix} +0.3 \\ 0 \end{smallmatrix}$	±0.5	15	1.30	1.30	31	2
HDH-12803CHD	10.5 ~ 14.5	$3 \begin{smallmatrix} +0.6 \\ 0 \end{smallmatrix}$	±0.5	12	1.40	1.40	31	2

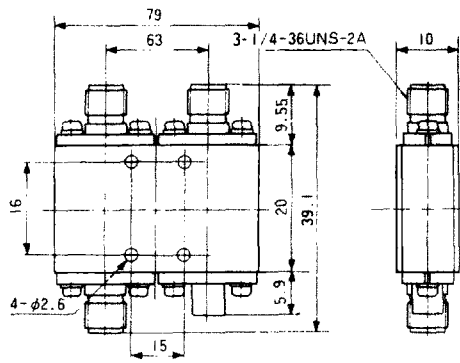
● Parts directly attached to the directional terminals of a termination are indicated by a final "D" included in their item number. (For example: HDH-00803GHD.)

● Directivity is the value obtained after subtracting the 3.0dB coupling.

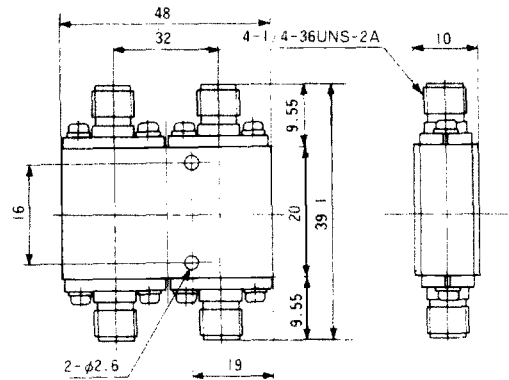
● The output and coupling have a 90° phase difference.

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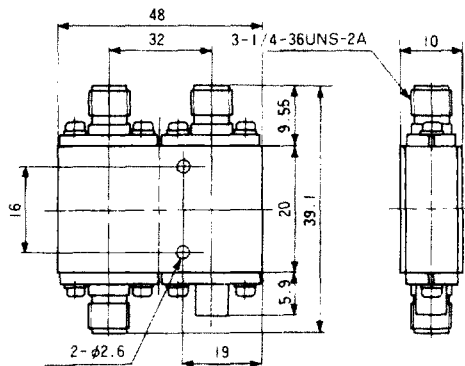
◆ DIMENSIONS



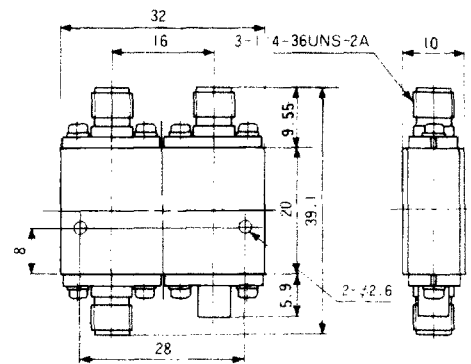
HDH-00803GHD



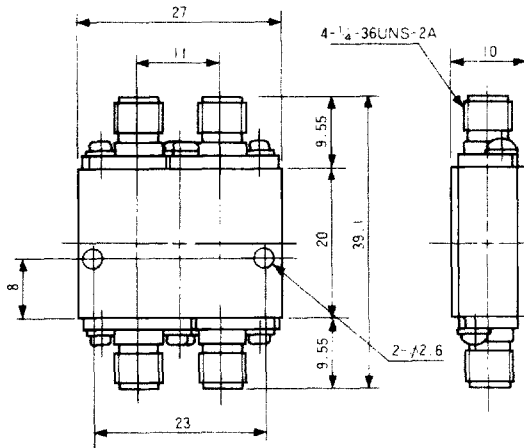
HDH-01503GH
HDH-01703CH



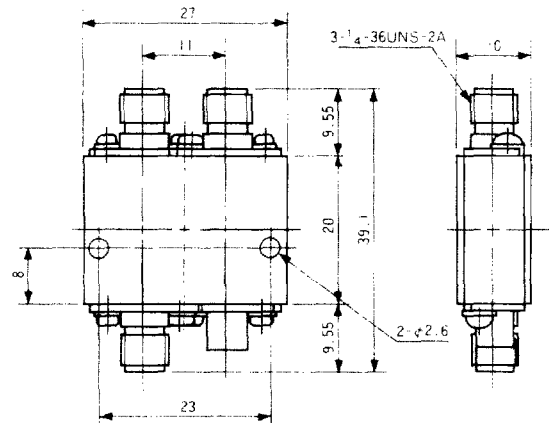
HDH-01503GHD
HDH-01703CHD
HDH-02003DHD



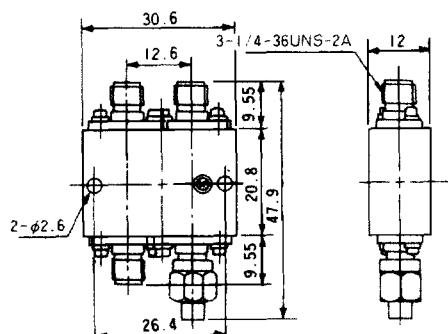
HDH-03003GHD



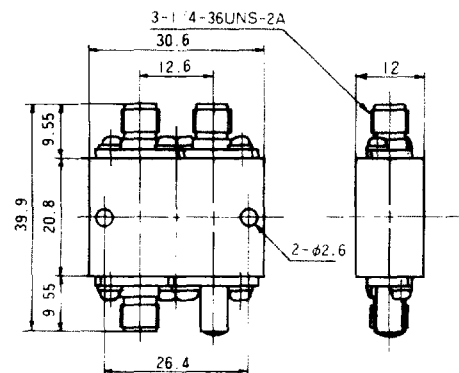
HDH-04003BH



HDH-06003GHD



HDH-09003GHD



HDH-12803CHD