

MICROWAVE COMPONENTS

0.5 to
14.5GHz

Coaxial Directional Couplers

CL 352

◆ GENERAL FEATURES

The Coaxial Directional Couplers are used for purposes such as monitoring power and frequency or reflected-wave measurement of oscillators, radar, and radio equipment. These devices employ the HRM (SMA) type stainless steel connector and offer;

compact size, light weight and high performance. Incorporation of the stripline triplate method into the design yields mechanical strength and superior environmental resistance, and the electrical characteristics in particular are excellent.

◆ 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

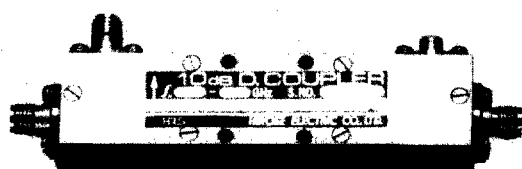
Vibration resistance; 10~55Hz

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

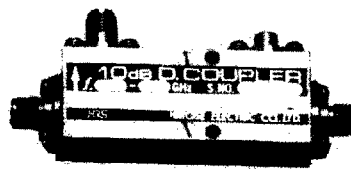
Temperature resistance; $-55^{\circ}\text{C} \sim +80^{\circ}\text{C}$

Impulse resistance; 490m/s²

Testing Method per MIL-STD-202



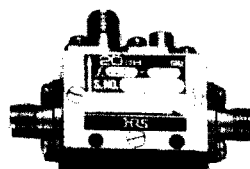
HDH-00810GID



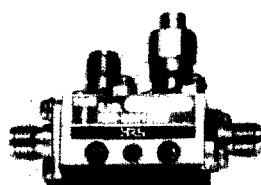
HDH-01510GID



HDH-03020GID



HDH-06020GID



HDH-09010GID



HDH-12806CID

MICROWAVE COMPONENTS

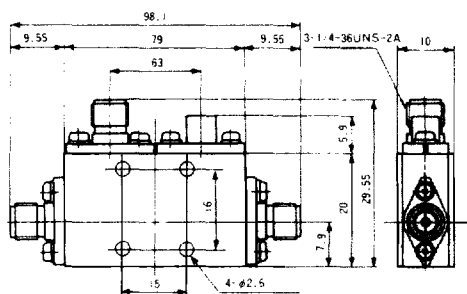
SPECIFICATIONS

Model No.	Frequency Range (GHz)	Coupling (dB)	Frequency Sensitivity (dB)	Insertion Loss (dB MAX)	Directivity (dB Min)	Primary Line VSWR (Max)	Secondary Line VSWR (Max)	Weight (g)	Power (W)	
HDH-00810GID	0.5~1.0	10±1.0	±0.75	0.3	20	1.15	1.15	49	10	
HDH-00937CI	0.8~1.0	37±1.0	±0.5	0.3	20	1.2	1.2	50	50	*
HDH-01510GID	1.0~2.0	10±1.2	±0.75	0.4	20	1.2	1.2	34	10	
HDH-01520GID	1.0~2.0	20±1.2	±0.75	0.4	18	1.2	1.2	34	50	*
HDH-01530CI	1.4~1.6	30±1.0	±0.25	0.5	20	1.2	1.2	34	50	*
HDH-01537CI	1.4~1.6	37±1.0	±0.3	0.5	20	1.2	1.2	34	50	
HDH-01706CID	1.5~1.9	6±1.0	±0.3	0.4	18	1.2	1.2	34	5	
HDH-01710CID	1.5~1.9	10±1.2	±0.3	0.4	20	1.2	1.2	34	10	
HDH-01720CID	1.5~1.9	20±1.2	±0.4	0.4	20	1.2	1.2	34	50	
HDH-01730CID	1.5~1.9	30±1.5	±0.4	0.4	18	1.2	1.2	34	50	
HDH-03010GID	2.0~4.0	10±1.2	±0.75	0.5	18	1.2	1.2	25	10	
HDH-03020GID	2.0~4.0	20±1.2	±0.75	0.5	18	1.2	1.2	25	50	
HDH-06010GID	4.0~7.8	10±1.2	±0.75	0.5	17	1.25	1.25	23	10	
HDH-06020GID	4.0~7.8	20±1.2	±0.75	0.5	17	1.25	1.25	23	50	
HDH-09006GID	8.0~11.0	6±1.2	±0.75	0.5	15	1.30	1.30	24	4	
HDH-09010GID	8.0~11.0	10±1.2	±0.75	0.5	15	1.30	1.30	24	10	
HDH-09020GID	8.0~11.0	20±2.0	±0.75	0.5	13	1.30	1.30	24	10	
HDH-12806CID	10.5~14.5	6±1.0	±0.5	2.1	15	1.30	1.35	28	4	*
HDH-12810CID	10.5~14.5	10±1.25	±0.5	1.1	15	1.30	1.35	28	10	*
HDH-12820CID	10.5~14.5	20±1.25	±0.5	0.6	15	1.30	1.35	28	50	*

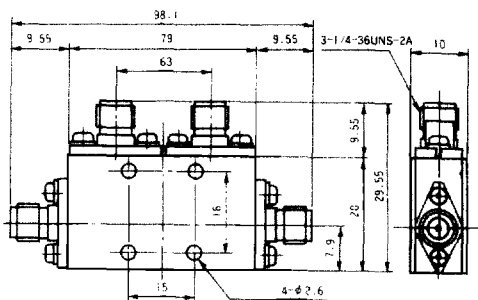
- Parts directly attached to the directional terminals of a termination are indicated by a final "D" included in their item number. (For example, HDH-00810GID.)
- Loss due to coupling is not included in insertion loss (except for items indicated by the X* symbol).

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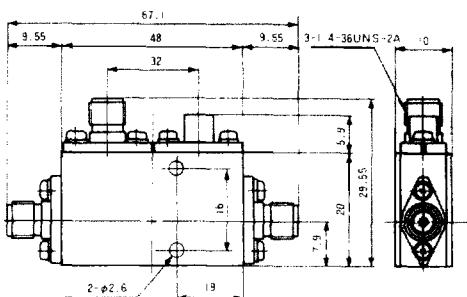
◆ DIMENSIONS



HDH-00810GID

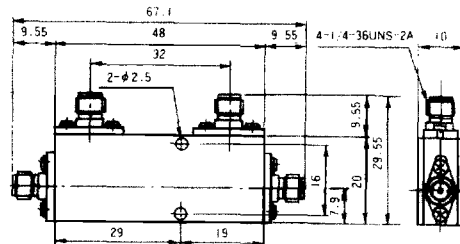


HDH-00937CI

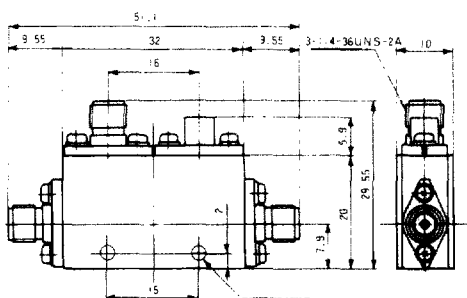


HDH-015¹⁰₂₀GID

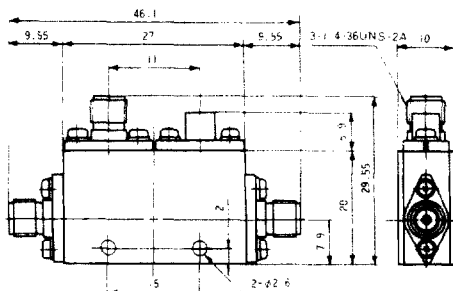
HDH-01706CID
HDH-01710CID
HDH-01720CID
HDH-01730CID



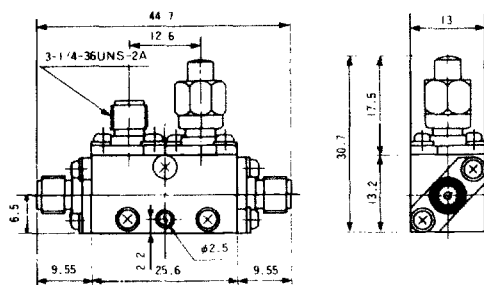
HDH-015³⁰₃₇CI



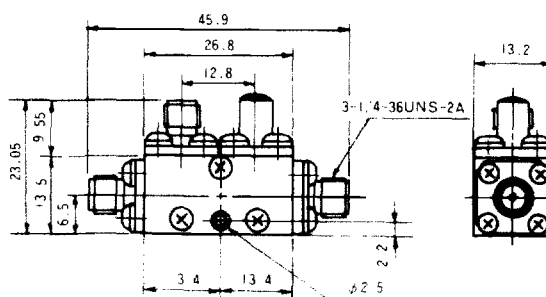
HDH-030¹⁰₂₀GID



HDH-060¹⁰₂₀GID



06
HDH-09010GID
20



06
HDH-12810CID
20