

Directional Coupler

Miniaturized, high efficiency and low cost Directional Coupler made by Hybrid IC's design knowhows and high precision pattern



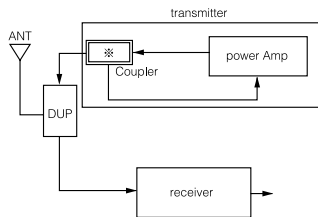
■ Features

- Miniature, thin ($1.6 \times 1.6 \times 0.6$ mm) and low cost
- For 0.7 GHz~2.0 GHz frequency range
- Input/Output port are alternative

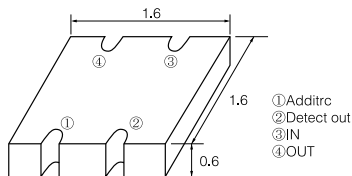
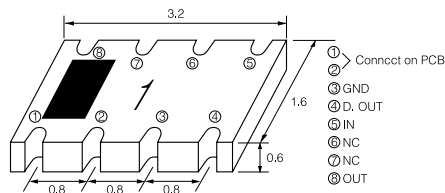
■ Recommended Applications

- Portable Telephone
- Personal handyphone System
- Mobile Communication System
- Dual Mode Portable Telephone

● Block Diagram



● Construction



■ Typical Characteristics

Part No.	EHDFD 1559 ^{※2}	EHDFD 1556 ^{※2}	EHDFD 1555 ^{※2}	EHDFD 1554 ^{※2}	EHDFD 1553 ^{※2}	EHFFD 1550	EHFFD 1540 ^{※1}	EHFFD 1541 ^{※1}	EHFFD 1543	EHFFD 1544	EHFFD 1552
Performance											
Frequency (GHz)	0.8~1.0	0.8~1.0	0.8~1.0	1.4~1.6	1.85~1.95	1.85~2.0	0.8~1.0	0.85~2.0	1.85~2.0	0.8~1.0	0.8~1.0 1.85~1.95
Insertion Loss (dB)	0.25dB max	0.35dB max	0.2dB max	0.3dB max	0.35dB max	0.3dB max	0.25dB max	0.4dB max	0.4dB max	0.25dB max	0.45dB max
Coupled Value (dB)	17±2dB ±1dB ※3	14±2dB ±1dB ※3	20±2dB ±1dB ※3	17±2dB ±1dB ※3	14±1dB	20±1dB	17±2dB ±1dB ※3	14±1dB	17±2dB ±1dB ※3	14±1dB	14±2dB
Isolation (dB)	25dB min	20dB min	28dB min	23dB min	20dB min	26dB min	25dB min	22dB min	20dB min	25dB min	20dB min
V S W R	1.3max	1.3max	1.3max	1.3max	1.3max	1.3max	1.3max	1.3max	1.3max	1.3max	1.3max
Size	3.2×1.6	3.2×1.6	3.2×1.6	3.2×1.6	3.2×1.6	3.2×1.6	1.6×1.6	1.6×1.6	1.6×1.6	1.6×1.6	3.2×1.6

※1 : External terminal resister (50Ω) must be connected

※2 : Part No. of EHD is transferred from EHD to EHF in order to standardize of Part No.

※3 : ±1dB for narrow Band