



Two-Way Radio Application

Yantel SMD Directional Coupler (PTFE, IC) & 3dB 90° Hybrid Coupler (PTFE) & Fixed Attenuator Chip

Cost Advantage: Around 40% cheaper than the price of equivalents from other manufacturers.

● SMD PTFE Directional Coupler(E,L,B size) and 3dB 90° Hybrid Coupler

Application: PDT、DMR(portable /mobile radio)digital trunked terminals.

Frequency: 190-400,350-520,700-1000MHz

Power Handling: 100-355W (average power)

Low VSWR, low insertion loss and excellent consistency

Temperature expansion coefficient is compatible with the materials(FR-4, G-10, RF-35, R04350).



Part No.	Frequency (MHz) f_L-f_U	Power (w)	Dimensions Length &Width (mm)	Insertion Loss (dB)	Coupling (dB)	Directivity (dB)	Return Loss (dB)
DC0450E20	350-400	100	14.22×5.08	0.3	20.0±1.0	18.5	18
	400-470				20.0±0.6	20	21
	470-520				20.0±0.5	20	21
DC0900E20	700-800	200	14.22×5.08	0.3	20.0±0.5	16	18
	800-900				20.0±0.5	17	19
	900-1000				20.0±0.5	18	20
DC0300L20	190-260	100	16.51×12.19	0.2	21±1.5	18	27
	260-330			0.2	21±1.0	16	27
	330-400			0.2	21±2.0	14	26
DC0900B30	800-1000	355	25.4×12.70	0.1	29.8±1.0	25	24.9

Part No.	Frequency	Power	Dimensions	Insertion Loss	Amplitude Balance(dB)	Phase Balance(degrees)	Return Loss (dB)	Isolation(dB)
HC0900B03	800-1000	300	25.4×12.70	0.15	±0.25	90±1.5	20.8	22

● SMD PTFE Directional Coupler(M size)

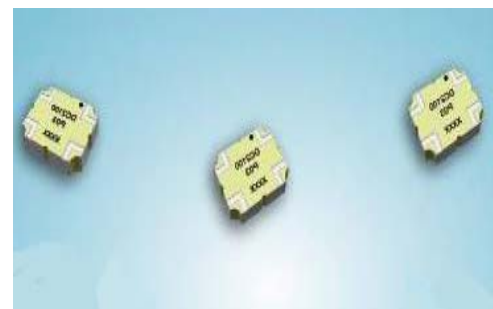
Application: PDT、DMR(portable /mobile radio)digital trunked terminals.

Frequency: 350-470,800-1000MHz

Power Handling: 20-60W (average power)

Low VSWR, low insertion loss and excellent consistency

Temperature expansion coefficient is compatible with the materials(FR-4, G-10, RF-35, R04350).



Part No.	Frequency (MHz) f_L-f_U	Power (w)	Dimensions Length &Width (mm)	Insertion Loss (dB)	Coupling (dB)	Directivity (dB)	Return Loss (dB)
DC0350M20	350-470	20	10.16×5.08	0.1	19.8±2.0	19	24
DC0900M30	800-1000	60	10.16×5.08	0.2	30±1.5	20	20

● **IC Directional Coupler**

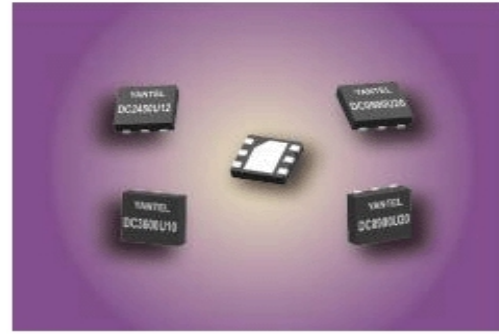
Application: TETRA portable radio

Frequency: 350-470,730-970MHz

Power handling: 4-5W (average power)

Coupling: 20dB/30dB

Dimensions: 2x2mm



Part No.	Frequency	Power	Dimensions	Insertion Loss	Coupling	Directivity	Return Loss
	(MHz) f _L -f _U	(w)	Length & Width (mm)	(dB)	(dB)	(dB)	(dB)
DC0410U20-060	350-410	5	2x2	19.5-18.3	0.11	1.06	20.2
	410-470			18.3-17	0.11	1.06	19.7
DC0850U20-122	730-800	5	2x2	21.7-20.7	0.10	1.06	28.1
	800-870			20.7-20.0	0.10	1.06	28.9
	870-970			20.0-19.1	0.10	1.06	29.5

● **Fixed Attenuator Chip**

Application: Explosion-proof portable radios

Frequency: DC-3GHz; DC-6GHz; DC-10GHz; DC-12.4GHz; DC-18GHz

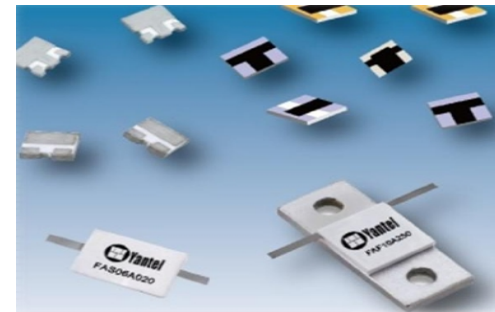
Laser trimmed, high attenuation accuracy

Ceramic chip: AlN, BeO

Attenuation: 1dB-50dB

Input Power: 100mW, 2W, 5W

Wide band characteristics, low VSWR



Custom services for various attenuations like 0.5dB are available and standard part unit price is applicable.

Application Introduction



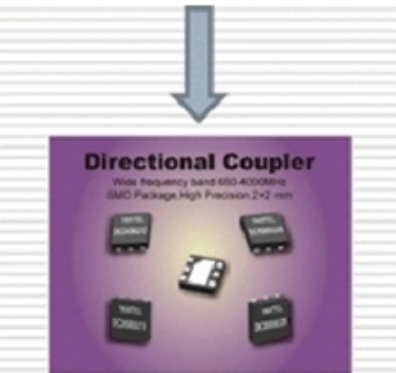
TETRA Portable Radio



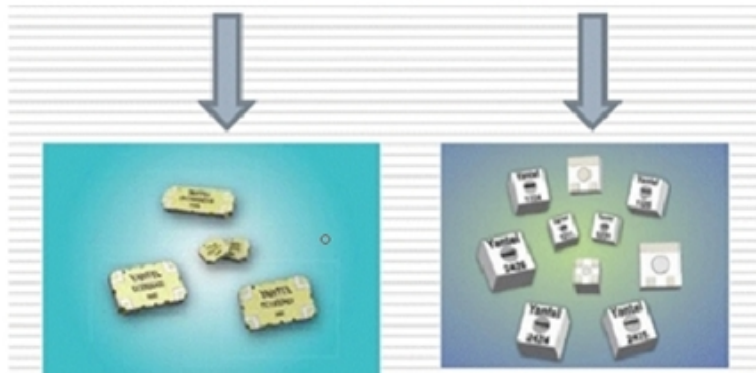
PDT, DMR Mobile Radio



Explosion-proof Portable Radio

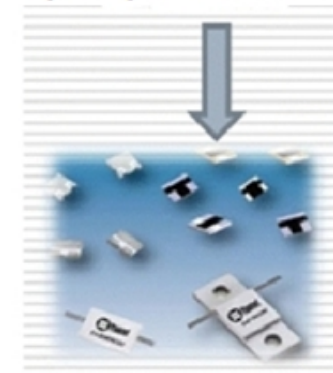


IC Directional Coupler



PTFE SMD Directional Coupler

RF Manual Tunable Inductor



Fixed Attenuator Chip