

RF multiplexers from ENRICHTEK provide a selection for the input RF signals to multiple desired outputs, the frequencies cover a wide range of bandwidths.

Our RF diplexers/multiplexers have features of high isolation, high rejection, low VSWR and low insertion loss, they are widely used in industry, aviation and military.

## Features

- Wide Frequency Range
- Excellent Performance
- Cost-effective Customization



4575-4775MHz / 5450-5650MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	4675MHz	5550MHz
Pass Band Frequency	4575 ~ 4775MHz	5450 ~ 5650MHz
Pass Band Insertion Loss	≤1.0dB	≤1.0dB
Pass Band VSWR	≤1.5:1	≤1.5:1
Stop Band Isolation	≥50dB@ 5450 ~ 5650MHz	≥50dB@ 4575 ~ 4775MHz
Power Handling	≤20W	
Impedance	50 ohms	
P/N	EDI-4E675-5E55	

5761.5-5788.5MHz / 5901.5-5928.5MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	5775MHz	5915MHz
Pass Band Frequency	5761.5 ~ 5788.5MHz	5901.5 ~ 5928.5MHz
Pass Band Insertion Loss	≤2.0dB	≤2.0dB
Pass Band Return Loss	≥15dB	≥15dB
Stop Band Rejection	≥65dB@ 5901.5 ~ 5928.5MHz	≥65dB@ 5761.5 ~ 5788.5MHz
Power	200W Max	
Impedance	50 ohms	
P/N	EDI-5E775-5E915	

1850-1910MHz / 1930-1990MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	1880MHz	1960MHz
Pass Band Frequency	1850 ~ 1910MHz	1930 ~ 1990MHz
Pass Band Insertion Loss	≤1.3dB	≤1.3dB
Pass Band Return Loss	≥18dB	≥18dB
Stop Band Rejection	≥20dB@ 1930 ~ 1990MHz	≥20dB@ 1850 ~ 1910MHz
Impedance	50 ohms	
Power Handling	≤20W	
P/N	EDI-1E88-1E96	

1805-1880MHz / 2110-2170MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	1842.5MHz	2140MHz
Pass Band Frequency	1805 ~ 1880MHz	2110 ~ 2170MHz
Pass Band Insertion Loss	≤1.0dB	≤1.0dB
Pass Band VSWR	≤1.3:1	≤1.3:1
Stop Band Attenuation	≥70dB@ 2110 ~ 2170MHz	≥70dB@ 1805 ~ 1880MHz
Impedance	50 ohms	
Power Handling	≤20W	
P/N	EDI-1E842-2E14	

1520-1565MHz / 1610-1635MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	1542.5MHz	1622.5MHz
Pass Band Frequency	1520 ~ 1565MHz	1610 ~ 1635MHz
Pass Band Insertion Loss	≤1.5dB	≤1.5dB
Pass Band VSWR	≤1.3:1	≤1.3:1
Stop Band Rejection	≥50dB@ 1610 ~ 1635MHz	≥50dB@ 1520 ~ 1565MHz
Impedance	50 Ohms	
Power	30W Max.	
P/N	EDI-1E542-1E622	

830-840MHz / 875-885MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	835MHz	880MHz
Pass Band Frequency	830 ~ 840MHz	875 ~ 885MHz
Pass Band Insertion Loss	≤1.0dB	≤1.0dB

Pass Band Ripple	$\leq 0.3\text{dB}$	$\leq 0.3\text{dB}$
Pass Band VSWR	$\leq 1.3:1$	$\leq 1.3:1$
Stop Band Attenuation	$\geq 70\text{dB@ } 857.5\text{MHz}$ $\geq 70\text{dB@ } 875 \sim 885\text{MHz}$	$\geq 70\text{dB@ } 857.5\text{MHz}$ $\geq 70\text{dB@ } 830 \sim 840\text{MHz}$
Impedance	50 ohms	
Power Handling	$\leq 10\text{W}$	
P/N	EDI-E835-E88	

<b>829.7-839.7MHz / 846.3-856.3MHz Diplexer</b>		
Parameters	CH1	CH2
Center Frequency( $f_0$ )	834.7MHz	851.3MHz
Pass Band Bandwidth	10MHz (829.7 ~ 839.7MHz)	10MHz (846.3 ~ 856.3MHz)
Pass Band Insertion Loss	$\leq 2.6\text{dB}$	$\leq 2.6\text{dB}$
Pass Band Ripple	$\leq 1.0\text{dB}$	$\leq 1.0\text{dB}$
Pass Band Return Loss	$\geq 18\text{dB}$	$\geq 18\text{dB}$
Stop Band Rejection	$\geq 45\text{dB@ } 846.3 \sim 856.3\text{MHz}$	$\geq 45\text{dB@ } 829.7 \sim 839.7\text{MHz}$
Impedance	50 Ohms	
Power	3W Max.	
P/N	EDI-E834-E851	

<b>758-768MHz / 788-798MHz Diplexer</b>		
Parameters	CH1	CH2
Center Frequency( $f_0$ )	763MHz	793MHz
Pass Band Frequency	758 ~ 768MHz	788 ~ 798MHz
Pass Band Insertion Loss	$\leq 1.0\text{dB}$	$\leq 1.0\text{dB}$
Pass Band Ripple	$\leq 0.3\text{dB}$	$\leq 0.3\text{dB}$
Pass Band VSWR	$\leq 1.3:1$	$\leq 1.3:1$
Stop Band Attenuation	$\geq 70\text{dB@ } 788 \sim 798\text{MHz}$	$\geq 70\text{dB@ } 758 \sim 768\text{MHz}$
Impedance	50 ohms	
Power Handling	$\leq 10\text{W}$	
P/N	EDI-E763-E793	

<b>750-810MHz / 830-870MHz Diplexer</b>		
Parameters	CH1	CH2
Center Frequency( $f_0$ )	780MHz	850MHz
Pass Band Frequency	750 ~ 810MHz	830 ~ 870MHz
Pass Band Insertion Loss	$\leq 1.2\text{dB}$	$\leq 1.2\text{dB}$
Pass Band VSWR	$\leq 1.3:1$	$\leq 1.3:1$
Stop Band Rejection	$\geq 25\text{dB@ } 830 \sim 870\text{MHz}$	$\geq 30\text{dB@ } 750 \sim 810\text{MHz}$

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Impedance	50 Ohms
Power	30W Max.
P/N	EDI-E78-E85

562.5-566.5MHz / 598-602MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	564.5MHz	600MHz
Pass Band Frequency	562.5 ~ 566.5MHz	598 ~ 602MHz
Pass Band Insertion Loss	≤0.9dB	≤0.9dB
Pass Band Return Loss	≥20dB	≥20dB
Stop Band Attenuation (S12&S13)	≥10dB@ 582MHz ≥80dB@ 598 ~ 602MHz ≥50dB@ DC ~ 544MHz ≥50dB@ 620 ~ 1200MHz	≥10dB@ 582MHz ≥80dB@ 562.5 ~ 566.5MHz ≥50dB@ DC ~ 544MHz ≥50dB@ 620 ~ 1200MHz
Isolation (S23)	≥45dB@ 582MHz ≥80dB@ 562.5 ~ 566.5MHz、598 ~ 602MHz ≥50dB@ DC ~ 544MHz ≥50dB@ 620 ~ 1200MHz	
Impedance	50 ohms	
Power Handling	Average: ≤20W ; Peak: ≤300W , 1ms	
P/N	EDI-E564-E6	

500-520MHz / 580-600MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	510MHz	590MHz
Pass Band Frequency	500 ~ 520MHz	580 ~ 600MHz
Insertion Loss	≤1.5dB	≤1.5dB
Return Loss	≥18dB	≥18dB
Rejection	≥65dB@ 580 ~ 600MHz	≥65dB@ 500 ~ 520MHz
Power	≤20W	
P/N	EDI-E51-E59	

468.5-472.5MHz / 498-502MHz Diplexer		
Parameters	CH1	CH2
Center Frequency (f0)	470.5MHz	500MHz
Pass Band Frequency	468.5 ~ 472.5MHz	498 ~ 502MHz
Pass Band Insertion Loss	≤0.9dB	≤0.9dB
Pass Band Return Loss	≥20dB	≥20dB
Stop Band Attenuation (S12&S13)	≥10dB@ 485MHz ≥80dB@ 498 ~ 502MHz	≥10dB@ 485MHz ≥80dB@ 468.5 ~ 472.5MHz

	$\geq 50\text{dB@ DC} \sim 450\text{MHz}$ $\geq 50\text{dB@ 520} \sim 1000\text{MHz}$	$\geq 50\text{dB@ DC} \sim 450\text{MHz}$ $\geq 50\text{dB@ 520} \sim 1000\text{MHz}$
Isolation (S23)	$\geq 45\text{dB@ 485MHz}$ $\geq 80\text{dB@ 468.5} \sim 472.5\text{MHz}$ 、 $498 \sim 502\text{MHz}$ $\geq 50\text{dB@ DC} \sim 450\text{MHz}$ $\geq 50\text{dB@ 520} \sim 1000\text{MHz}$	
Impedance	50 ohms	
Handling Power	Average: $\leq 20\text{W}$ ; Peak: $\leq 300\text{W}$ , 1ms	
P/N	EDI-E47-E50	

791-821MHz / 832-862MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	806MHz	847MHz
Pass Band Frequency	791 ~ 821MHz	832 ~ 862MHz
Insertion Loss	$\leq 1.2\text{dB}$	$\leq 1.2\text{dB}$
Ripple	$\leq 0.8\text{dB}$	$\leq 0.8\text{dB}$
VSWR	$\leq 1.3:1$	$\leq 1.3:1$
Rejection	$\geq 60\text{dB@832} \sim 862\text{MHz}$	$\geq 60\text{dB@791} \sim 821\text{MHz}$
Power	100W	
P/N	EDI2-E816-E847	

1710-1785MHz / 1805-1880MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	1747.5MHz	1842.5MHz
Pass Band Frequency	1710 ~ 1785MHz	1805 ~ 1880MHz
Insertion Loss	$\leq 1.4\text{dB}$	$\leq 1.4\text{dB}$
Ripple	$\leq 0.8\text{dB}$	$\leq 0.8\text{dB}$
VSWR	$\leq 1.3:1$	$\leq 1.3:1$
Rejection	$\geq 60\text{dB@1805} \sim 1880\text{MHz}$	$\geq 60\text{dB@1710} \sim 1785\text{MHz}$
Power Handling	50W	
P/N	EDI2-1E747-1E842	

2400-2500MHz / 5700-5900MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	2450MHz	5800MHz
Pass Band Frequency	2400 ~ 2500MHz	5700 ~ 5900MHz
Insertion Loss	$\leq 0.5\text{dB}$	$\leq 1.0\text{dB}$
Ripple	$\leq 0.3\text{dB}$	$\leq 0.5\text{dB}$
Return Loss	$\geq 18\text{dB}$	$\geq 18\text{dB}$
Stop Band Attenuation	$\geq 90\text{dB@ 5700} \sim 5900\text{MHz}$	$\geq 90\text{dB@ 2400} \sim 2500\text{MHz}$

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Power Handling	≤50W
P/N	EDI2-2E45-5E8

1920-1980MHz / 2110-2170MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	1950MHz	2140MHz
Pass Band Frequency	1920 ~ 1980MHz	2110 ~ 2170MHz
Insertion Loss	≤1.5dB	≤1.5dB
Ripple in Band	≤1.0dB	≤1.0dB
VSWR	≤1.3:1	≤1.3:1
Rejection	≥10dB@ Fc±10MHz (1910MHz、1990MHz)	≥10dB@ Fc±10MHz (2100MHz、2180MHz)
	≥60dB@ Fc±60MHz (1860MHz、2040MHz)	≥60dB@ Fc±60MHz (2050MHz、2230MHz)
	≥80dB@ Fc±130MHz (1790MHz、2110MHz)	≥80dB@ Fc±130MHz (1980MHz、2300MHz)
Power Handling	≤30W	
Impedance	50 ohms	
P/N	EDI-1E95-2E14	

360-362MHz / 368-370MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	361MHz	369MHz
Pass Band Frequency	360 ~ 362MHz	368 ~ 370MHz
Insertion Loss	≤1.5dB	≤1.5dB
VSWR	≤1.3:1	≤1.3:1
Rejection	≥35dB@ 368 ~ 370MHz	≥35dB@ 360 ~ 362MHz
Impedance	50 ohms	
Power	≤20W	
P/N	EDI-E361-E369	

399-405MHz and 464-470MHz Diplexer		
Parameters	CH1	CH2
Center Frequency(f0)	402MHz	467MHz
Pass Band Frequency	399 ~ 405MHz	464 ~ 470MHz
Pass Bands Insertion Loss	≤0.5dB	≤0.5dB
Pass Bands Ripple	≤0.2dB	≤0.2dB
Pass Bands Return Loss	≥20dB	≥20dB
Stop Band Rejection	≥60dB@ 464 ~ 470MHz	≥60dB@ 399 ~ 405MHz
Impedance	50 ohms	

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Power Handling	≤30W
P/N	EDI-E402-E467

350-370MHz/806-866MHz/403-425MHz Triplexer			
Parameters	CH1	CH2	CH3
Center Frequency(f0)	360MHz	836MHz	414MHz
Pass Band Frequency	350 ~ 370MHz	806 ~ 866MHz	403 ~ 425MHz
Pass Band Insertion Loss	≤1.0dB	≤0.6dB	≤1.0dB
Pass Band Return Loss	≥16dB	≥16dB	≥16dB
Stop Band Rejection	≥70dB@ 403 ~ 866MHz	≥70dB@ 350 ~ 425MHz	≥70dB@ 350 ~ 370MHz ≥70dB@ 806 ~ 866MHz
Impedance	50 Ohms		
Power	50W CW Max.		
P/N	EMT-E36-E414		

1940-1970MHz/2010-2025MHz/2130-2160MHz Triplexer			
Parameters	CH1	CH2	CH3
Center Frequency(f0)	1955MHz	2017.5MHz	2145MHz
Pass Band Frequency	1940 ~ 1970MHz	2010 ~ 2025MHz	2130 ~ 2160MHz
Insertion Loss	≤1.0dB	≤1.0dB	≤1.0dB
VSWR	≤1.3:1	≤1.3:1	≤1.3:1
Rejection	≥60dB@ 2010 ~ 2025MHz	≥60dB@ 1940 ~ 1970MHz	≥60dB@ 1940 ~ 1970MHz
	≥60dB@ 2130 ~ 2160MHz	≥60dB@ 2130 ~ 2160MHz	≥60dB@ 2010 ~ 2025MHz
P/N	EMT-1E955-2E145		

1745-1780MHz/1840-1875MHz/1920-1980MHz/2110-2170MHz Quadruplexer				
Parameters	CH1	CH2	CH3	CH4
Center Frequency(f0)	1762.5MHz	1857.5MHz	1950MHz	2140MHz
Pass Band Frequency	1745 ~ 1780MHz	1840 ~ 1875MHz	1920 ~ 1980MHz	2110 ~ 2170MHz
Insertion Loss	≤1.5dB	≤1.5dB	≤1.5dB	≤1.5dB
Ripple in Band	≤1.0dB	≤1.0dB	≤1.0dB	≤1.0dB
VSWR	≤1.5:1	≤1.5:1	≤1.5:1	≤1.5:1
Rejection	≥60dB @ 1840 ~ 2170MHz	≥60dB @ 1745 ~ 1780MHz	≥60dB @ 1745 ~ 1875MHz	≥60dB @ 1745 ~ 1980MHz
		≥60dB @ 1920 ~ 2170MHz	≥60dB @ 2110 ~ 2170MHz	
Power Handling	≤40W			

Impedance	50 ohms
P/N	EMD-1E745-2E14

### 380-385MHz/390-395MHz/410-415MHz/420-425MHz Quadruplexer

Parameters	CH1	CH2	CH3	CH4
Center Frequency (f0)	382.5MHz	392.5MHz	412.5MHz	422.5MHz
Pass Band Frequency	380 ~ 385MHz	390 ~ 395MHz	410 ~ 415MHz	420 ~ 425MHz
Pass Band Insertion Loss	≤2.5dB	≤2.5dB	≤2.5dB	≤2.5dB
Pass Band Return Loss	≥15dB	≥15dB	≥15dB	≥15dB
Stop Band Attenuation	≥40dB @ 390 ~ 410MHz	≥40dB @ 380 ~ 385MHz	≥60dB @ 380 ~ 395MHz	≥60dB @ 380 ~ 395MHz
	≥60dB @ 410 ~ 425MHz	≥60dB @ 410 ~ 425MHz	≥40dB @ 420 ~ 425MHz	≥40dB @ 410 ~ 415MHz
Impedance	50 ohms			
Power Handling	≤20W			
P/N	EMD-E382-E422			

### 791-821MHz/1805-1880MHz/2110-2170MHz/2620-2690MHz Quadruplexer

Parameters	CH1	CH2	CH3	CH4
Center Frequency(f0)	806MHz	1842.5MHz	2140MHz	2655MHz
Pass Band Frequency	791 ~ 821MHz	1805 ~ 1880MHz	2110 ~ 2170MHz	2620 ~ 2690MHz
Pass Band Insertion Loss	≤1.0dB	≤1.0dB	≤1.0dB	≤1.0dB
Pass Band VSWR	≤1.3:1	≤1.3:1	≤1.3:1	≤1.3:1
Stop Band Attenuation	≥70dB@1805 ~ 2690MHz	≥70dB@ 791 ~ 821MHz ≥70dB@ 2110 ~ 2690MHz	≥70dB@ 791 ~ 1880MHz ≥70dB@ 2620 ~ 2690MHz	≥70dB@ 791 ~ 2170MHz
Impedance	50 ohms			
Power Handling	≤20W			
P/N	EMQ-E806-2E655			