

Dual Window Coupler (DWC)

Dual window coupler (DWC) is built by asymmetric coupling technique. The operating bandwidth of this normal coupler is expanding to $\pm 40\text{nm}$, and the ultra broadband coupler is expanding to $\pm 80\text{nm}$. The DWC coupler has the same coupling ratio on both 1310nm and 1550nm communication windows, and with low excess loss and low PDL. DWC couplers are widely used for communication systems, CATV, and FTTH.

Features: Low excess loss

Low PDL

Dual operating window

High stability and reliability

Applications: Optical communication systems

CATV

FTTH

Specifications:

Parameter	Type	Normal				
		U	P	A	P	A
Grade		U	P	A	P	A
Operating wavelength(nm)		1310 and 1550				
Operating bandwidth(nm)		± 40				
Typical excess loss(db)		0.07	0.07	0.10	0.07	0.10
Insertion loss(dB)	50/50	≤ 3.4	≤ 3.6	≤ 3.8	≤ 3.8	≤ 4.0
	40/60	$\leq 4.5/2.6$	$\leq 4.7/2.7$	$\leq 4.9/2.9$	$\leq 5.0/2.8$	$\leq 5.2/3.0$
	30/70	$\leq 5.7/1.9$	$\leq 6.0/1.9$	$\leq 6.3/2.1$	$\leq 6.4/2.0$	$\leq 6.7/2.2$
	20/80	$\leq 7.6/1.2$	$\leq 7.9/1.2$	$\leq 8.4/1.4$	$\leq 8.3/1.3$	$\leq 8.7/1.5$
	10/90	$\leq 11.0/0.65$	$\leq 11.3/0.65$	$\leq 12.0/0.8$	$\leq 11.5/0.7$	$\leq 12.0/0.8$
	5/95	$\leq 14.2/0.4$	$\leq 14.6/0.4$	$\leq 15.5/0.5$	$\leq 14.6/0.45$	$\leq 15.5/0.5$
	2/98	$\leq 18.4/0.25$	$\leq 18.8/0.3$	$\leq 19.5/0.4$	$\leq 18.8/0.3$	$\leq 19.5/0.4$
	1/99	$\leq 21.5/0.2$	$\leq 22.5/0.25$	$\leq 23.5/0.35$	$\leq 22.5/0.25$	$\leq 23.5/0.35$
PDL(dB)		≤ 0.1	≤ 0.15	≤ 0.2	≤ 0.15	≤ 0.20
Directivity(dB)		≥ 5				
Operating temperature(°C)		$-40 \sim +85$				

Package

Information:

Configuration	1×2 or 2×2		
Fiber lead length	1 meter , others on request		
Fiber type	250 μm bare fiber	900 μm loose tube	900 μm /2mm/3mm loose tube
Dimensions (Φ×L)	Φ3mm×54mm	Φ3mm×60mm	90mm×14mm×8.5mm