



Cellular/WiFi-WiMax Diplexer, BK-27N

Diplexer for W-LAN 802.11(a/b/g/n) to other services
80 - 1990/2400 - 2700 & 4900 - 5850 MHz, N

- ◆ Combines 2.4 & 5 GHz WiFi & 2.6 and 4.9 GHz WiMAX to most other cellular services
- ◆ 50 dB Input Isolation
- ◆ 50W Cellular Input Power
- ◆ Minimal RF Insertion Loss
- ◆ Rugged, High Reliability Design
- ◆ Low Passive IM., PIM
- ◆ Low Cost Design



The **BK-27N** Diplexer has been designed to be small and lightweight, using passive, proprietary techniques to ensure minimal loss and very high reliability.

BK-27N allows efficient combining of WiFi services at the standard WiFi standards of 802.11 (a), (b), (g) and (n) at 2.4 GHz and 5.8 GHz together with WiMAX at 2.6 and 4.9 GHz with a coaxial distributed in-building cellular network or DAS. This can provide the benefit of the same controlled coverage of the higher frequency services with the DAS.

A simple bracket and tapped holes are provided for simple mounting to a surface or cable tray. The unit is also available painted for outdoor applications, as Model **BK-27NP**, and with SMA connectors to special order. (07/11)

Passband J1 to J3:	2.4 - 2.7 GHz and 4.9 - 5.85 GHz
Passband J2 to J3:	80 to 1990 MHz
J1 to J2 Isolation:	>50dB in 80-1990, 4900-5500 MHz >40dB in 2400-2700 MHz band
VSWR, all ports:	<1.3:1
Passband Loss:	
J2 - J3 Low Band:	0.25 dB typ., 0.3 dB max.
J1 - J3 High band:	0.3 dB typ., 0.6 dB max.
Power: J2 - J3 Low Band:	50W avg. max., DC of <2.5A
J1 - J3 High band:	10W avg. max.,
Impedance:	50Ω nominal
Intermod. Distortion:	<-145 dBc, -150 dBc typ. (test with 2 x +43 dBm tones)
Environment:	0° - +55°C, IP64 Indoor use
for Outdoor/IP67:	Use Model No: BK-27NP (painted)
Finish: N Connectors:	Triplate
Housing:	Passivated aluminum, RoHS
Weight, nominal:	13 oz (365 g)

