



Cellular/GSM, PCS/DCS Cross-Band Coupler 824 - 894, 1850 - 1990 MHz

- Integrates 2 Wireless Bands
- ♦ 50 dB Input Isolation
- ♦ 250 W/port Avg. Power
- Minimal RF Insertion Loss
- Rugged, Reliable
- ♦ Low Passive IM., PIM
- ♦ RoHS compliant
- Very Low Cost Design
- ♦ N or 7-16 mm connectors

BK-40 series is a pair of Diplexers which combines or separates the signals in the low and high wireless bands. To minimize band inter-reaction, the inputs are well isolated from each other. This dual model includes Diplexers for both uplink and downlink, each optimized for back to VSWR performance.

Using passive, proprietary techniques to minimize cost and size, it ensures minimal loss and very high reliability at input powers up to 250W per input. (11/10)

Model Nur	mber	Optimized Low	and High Band
N conn.	7-16 mm	P1 - P3 MHz	P2 - P3 MHz
BK-40N	BK-40D	824 - 894	1850 - 1990

Other Low/High Band combinations available as specials

Port 1 (P1): Low Band (824 - 894 MHz)
Port 2 (P2): High Band (1850 - 1990 MHz)

Port 3 (P3): Common Port

P1:P2 Isolation: >50 dB in specified band
DC continuity: All paths. DC blocks optional
VSWR, all ports: 1.10:1 typ., 1.12:1 max.
Passband Loss: <0.15 dB, 0.11dB typ.
Input Power: 250W/input avg., 3 kW peak

Impedance:  $50\Omega$  nominal

Environment: -35 to +65°C, IP64 (IP67 to order) Intermod. (PIM): <-150 dBc\* tested with

<-150 dBc\* tested with 2 x +43dBm (20W) tones

Finish: Connectors: Triplated (f), N or 7-16 mm DIN

Housing: Conversion Coated

Mounting: Bracket available for pole mount

Weight, nominal: 6.6 lbs (3 kg)

\*PIM guaranteed to <-160 dBc available to special order

