

## \$ Saver Product Line

- ◆ Combines bands for co-located BTS or In-building Systems
- ◆ High Input Isolation and Power
- ◆ Both paths pass DC/AISG
- ◆ Low Passive IM., PIM
- ◆ Conforms to AISG and RoHS
- ◆ Single or Dual Wall/Mast Mounting



Microlab Model BK-25D series is a cavity Diplexer which allows combination and separation of signals in the GSM-1800 and UMTS wireless bands. In the standard off the shelf unit (BK-25CD) both paths pass DC, meeting the requirements of AISG & 3GPP, but a DC Block, HR-20D, could be used should it be essential to block the DC to one or both signal paths. Alternatively, units may be ordered with the required DC paths internally preset. Dual units should also be ordered as sets using the appropriate model number.

Attention to mechanical design, ensures low loss, low passive intermodulation and high reliability. (09/13).

DC/AISG Path Requirement		Model No.	
Common (P1) path to GSM (P2)	UMTS (P3)	w/Single Mount Kit	w/Dual Mount Kit
none	DC Path	<b>BK-25AD</b>	<b>BK-25ED</b>
DC Path	none	<b>BK-25BD</b>	<b>BK-25FD</b>
DC Path	DC Path	<b>BK-25CD</b>	<b>BK-25GD</b>
none	none	<b>BK-25DD</b>	<b>BK-25HD</b>

Insertion Loss/Isolation: Common (Port 1) to		
Band, MHz	Port 2 (1710-1880)	Port 3 (1920-2170)
GSM-1800 (Port 2)	0.2 dB typ 0.5 dB max	>65 dB
UMTS-2100 (Port 3)	>65 dB	0.2 dB typ 0.5 dB max

GSM-1800 Passband:	1710 - 1880 MHz (Port 2)
UMTS-2100 Passband:	1920 - 2170 MHz (Port 3)
Isolation to 2600 MHz:	>60dB (2500 - 2700 MHz)
Return Loss, all ports:	18 dB min.
Power Rating:	250W avg., 1 kW pk. max.
Impedance:	50Ω nominal
Intermod. (PIM IM3):	<-140 dBc* (with 2 x +43dBm tones into common port, P1)
AISG/DC Continuity:	2.5A max (to AISG) all paths
Environment:	-40°C to +60°C, IP67
Surge Protection:	5 kA using 8/20μs pulse
Finish: Connectors:	7-16 (f) long neck triplated
Housing Finish:	Painted aluminum
Weight, single, nom:	5.7 lbs., 2.6 kg with bracket

\*<-150 dBc optional

