

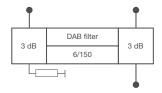
Band 3 DAB CIB Combiners

- CCS compact design
- For 1.54 MHz block width
- Integrated mask filters for DAB and T-DMB
- Adjacent block operation
- Temperature compensated
- Filters with cross coupling (notch function)





BN 574916



Frequency rangeIntervenceBlook spacing $ $	Part Number	BN 574918	BN 574916
Narrowbait input $15/8^{\circ} EIA$ Filter type integrated cavities/size $6/150 \equiv B + 617144$ Temperature stability $\leq 1 kHz / K$ Harmonics attenuation $\geq 500 Bt or f \leq 500 MHz$ DAB and T-DMB mask filtering $DAB / T-DMB \oplus 1.54 MHz$ Average input power $\leq 3.2 kW$ Tuning instruction $AS6137$ Insertion loss & mask filtering $f_0 \leq 0.75 dB$ (aternative tuning on request) $f_0 \leq 0.75 dB$ $f_0 \pm 0.77 \leq 11.6 dB$ $f_0 \pm 0.77 \leq 0.90 dB$ $f_0 \pm 0.77 \leq 15.6 dB$ $f_0 \pm 0.77 \leq 10.90 dB$ $f_0 \pm 0.77 \leq 15.6 dB$ $f_0 \pm 0.77 \leq 10.90 dB$ $f_0 \pm 2.2 \geq 58 dB$ $f_0 \pm 1.75 \geq 15 dB$ $f_0 \pm 3.0 \geq 52 dB$ $f_0 \pm 3.0 \times 50 dB$ Group delay variation $\Delta r \leq 1000 ns$ Average input power $\leq 14 kW$ Average input power $\leq 11.98^{\circ} EIA$ Average input power $\leq 12.7 kV$ Average output voltage $\leq 7.7 kV$ Average output power $\leq 13.5 kW$ $\leq 10 tbut voltage$ $\leq 1.2.7 kV$ Average output power $\leq 13.5 kW$ Stability to the solution the solutio	Frequency range	170 - 240 MHz	
Filter type integrated cavities/size $6'150 = B + 1744$ Temperature stability $\le 1 \ k \ z \ z \ 0 \ dB \ or \ z \ 0 \ dB \ dT \ DMB \ dT \ DMB \ dT \ dB \ dT \ dT \ dT \ dT \ dT \ d$	Block spacing	≥ 0	
Interface Temperature stability $\leq 1 \text{ kHz / K}$ Harmonics attenuation $\geq 50 \text{ dB for } \leq 500 \text{ MHz}$ DAB and T-DMB mask filtering $DAB / TDMB \otimes 1.54 \text{ MHz} / (U/U_m=13 dB)$ Average input power $\leq 3.2 \text{ WT}$ Tuning instructionAS 6137Insertion loss & mask filtering (alternative tuning on request) $f_0 \pm 0.77 \leq 1.6 \text{ dB} \\ f_0 \pm 0.77 & 0.90 \text{ dB} \\ f_0 \pm 0.78 & 0.90 \text{ dB} \\ f_$	Narrowband input	1 5/8" EIA	
Harmonics attenuation \leq 50 dB for f \leq 500 MHzDAB and T-DMB mask filtering $DAB/T-DMB \otimes 1.54$ MHz $(UU_{mm}=13 dB)$ Average input power \leq 3.2Tuning instructionAS6137AS6149Insertion loss & mask filtering (alternative tuning on request) $f_0 \leq 0.75 dB \\ f_0 \pm 0.77 \leq 1.6 dB \\ f_0 \pm 0.77 \leq 1.5 dB \\ f_0 \pm 0.77 \leq 0.09 dB \\ f_0 \pm 0.75 \leq 0.09 dB \\ f_0 \pm 0.75 \leq 0.09 dB \\ f_0 \pm 0.75 \leq 0.0$	Filter type integrated cavities/size	6/150 ≡ BN 617144	
DAB and T-DMB mask filteringDAB / T-DMB mask filteringAverage input power $< S = S = S = S = S = S = S = S = S = S $	Temperature stability	\leq 1 kHz / K	
DAB and I-DMB mask tilteringCUUT mathematical colspan="2">CUUT mathematical colspan="2" Colspa	Harmonics attenuation	\geq 50 dB for f \leq 500 MHz	
Tuning instructionAS6137AS6149Insertion loss & mask filtering (alternative tuning on request) $\int_0^{-1} \le 0.75 \text{ dB}$ $\int_0^{-1} \pm 0.77 \le 0.90 \text{ dB}$ $\int_0^{-1} \pm 0.97 \ge 15 \text{ dB}$ $\int_0^{-1} \pm 0.97 \ge 1$	DAB and T-DMB mask filtering		
Insertion loss & mask filtering (alternative tuning on request) $f_0 \pm 0.77 \le 1.6 \text{ dB}$ $f_0 \pm 0.97 \ge 15 \text{ dB}$ $f_0 \pm 0.97 \ldots d.$ $f_0 \pm 1.75 \ge 15 \text{ dB}$ $f_0 \pm 2.2 \ge 40 \text{ dB}$ $f_0 \pm 2.2 \ge 40 \text{ dB}$ $f_0 \pm 3.0 \ge 52 \text{ dB}$ $\Delta \tau \le 400 \text{ ns}$ Group delay variation $\Delta \tau \le 1000 \text{ ns}$ $\Delta \tau \le 400 \text{ ns}$ Wideband input $\Delta \tau \le 1000 \text{ ns}$ $\Delta \tau \le 400 \text{ ns}$ Average input power $\leq 14 \text{ kW}$ $\leq 30 \text{ kW}$ Mask filtering Insertion loss $-$ Output $15/8^{\circ}$ EIA $31/8^{\circ}$ EIA malePeak output voltage Average output power $\leq 7.7 \text{ kV}$ $\leq 12.7 \text{ kV}$ Solution between inputs $\leq 13.5 \text{ kW}$ $-$ VSWR $\leq 30 \text{ kW}$ $\leq 30 \text{ kW}$	Average input power	≤ 3.2 kW	
(alternative tuning on request) $f_0 \pm 0.77 \le 1.6 \text{ dB} f_0 \pm 0.77 \ge 1.6 \text{ dB} f_0 \pm 0.77 \ge 0.90 \text{ dB} f_0 \pm 0.97 \ n.d. f_0 \pm 0.77 \ l = 0.90 \text{ dB} f_0 \pm 0.97 \ n.d. f_0 \pm 0.90 \ dB f_0 \pm 0.97 \ n.d. f_0 \pm 0.97 \ n.d$	Tuning instruction	AS6137	AS6149
Wideband input1 5/8" EIA3 1/8" EIA maleAverage input power \leq 14 kW \leq 30 kWAttention: The power at the widebard input must be reduced by 50 % of the power fed into the narrowband input.Mask filtering \sim Insertion loss \leq 0.1 dB (\sim total)Output1 5/8" EIA3 1/8" EIA malePeak output voltage \leq 7.7 kV \leq 12.7 kVAverage output power \leq 13.5 kW $-$ Isolation between inputs \leq 3.1 kW \leq 3.1 kW		$\begin{array}{ll} f_0 \pm 0.77 &\leq 1.6 \ \text{dB} \\ f_0 \pm 0.97 &\geq 15 \ \text{dB} \\ f_0 \pm 1.75 &\geq 45 \ \text{dB} \\ f_0 \pm 2.2 &\geq 58 \ \text{dB} \end{array}$	$ \begin{array}{ll} f_0^{-} \pm 0.77 & \leq 0.90 \ \text{dB} \\ f_0 \pm 0.97 & \text{n.d.} \\ f_0 \pm 1.75 & \geq 15 \ \text{dB} \\ f_0 \pm 2.2 & \geq 40 \ \text{dB} \end{array} $
Average input power $\leq 14 \text{ kW}$ $\leq 30 \text{ kW}$ Attention: The power at the widebarr input must be reduced by 50 % of the power fed into The narrowband input.Mask filtering \sim Insertion loss $\leq 0.1 \text{ dB} (\text{moments})$ Output15/8" EIAPeak output voltage $\leq 7.7 \text{ kV}$ Average output power $\leq 13.5 \text{ kW}$ Isolation between inputs $\leq 3 \text{ dB}$ VSWR $\leq 12.7 \text{ kV}$	Group delay variation	$\Delta \tau \leq 1000 \text{ ns}$	$\Delta \tau \leq 400 \text{ ns}$
Attention: The power at the wideband input must be reduced by 50 % of the power fed into the narrowband input.Mask filteringNoInsertion loss≤ 0.1 dB (non adjacent)Output1 5/8" EIA3 1/8" EIA malePeak output voltage≤ 17.7 kV≤ 12.7 kVAverage output power≤ 13.5 kW–Isolation between inputs≤ 3 ± ±VSWR≤ 1.1	Wideband input	1 5/8" EIA	3 1/8" EIA male
Mask filteringNoInsertion loss≤ 0.1 dB (nor adjacent)Output1 5/8" EIAPeak output voltage≤ 12.7 kVAverage output power≤ 13.5 kWIsolation between inputs< 1VSWR< 1	Average input power	≤ 14 kW	≤ 30 kW
Insertion loss $\leq 0.1 dB$ ($\rightarrow adjacent$)Output15/8" EIA31/8" EIA malePeak output voltage $\leq 7.7 kV$ $\leq 12.7 kV$ Average output power $\leq 13.5 kW$ $-$ Isolation between inputs $\leq 3 \exists B$ VSWR $\leq 12.7 kV$			
Output1 5/8" EIA3 1/8" EIA malePeak output voltage ≤ 7.7 kV ≤ 12.7 kVAverage output power ≤ 13.5 kW $-$ Isolation between inputs $\geq 3 \exists IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII$	Mask filtering	No	
Peak output voltage ≤ 7.7 kV ≤ 12.7 kV Average output power ≤ 13.5 kW – Isolation between inputs ≥ 35 dB VSWR ≤ 1.1	Insertion loss	≤ 0.1 dB (non adjacent)	
Average output power ≤ 13.5 kW - Isolation between inputs ≥ 35 dB VSWR ≤ 1.1	Output	1 5/8" EIA	3 1/8" EIA male
Isolation between inputs ≥ 35 dB VSWR ≤ 1.1	Peak output voltage	$\leq 7.7 \text{ kV}$	≤ 12.7 kV
VSWR ≤ 1.1	Average output power	≤ 13.5 kW	-
	Isolation between inputs	≥ 35 dB	
Dimensions (L x W x H) mm 800 x 390 x 1420	VSWR	≤ 1.1	
	Dimensions (L x W x H) mm	800 x 390 x 1420	
Weight ≈ 120 kg ≈ 130 kg	Weight	≈ 120 kg	≈ 130 kg
Environmental conditions For limitations see "Environmental Conditions for Broadcast Products".	Environmental conditions	For limitations see "Environmental Conditions for Broadcast Products".	