FEATURES:

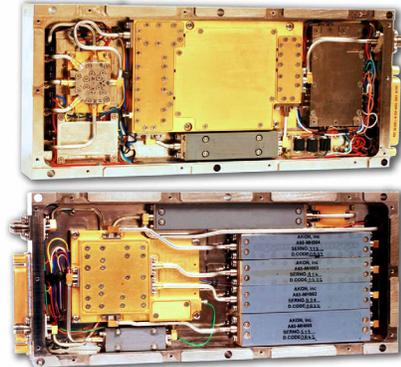- **1.0 - 18.0 GHz COVERED IN 5 BANDS**
- **RF OUTPUT FOR FREQUENCY MEASUREMENT**
- **65 dB CHANNEL TO CHANNEL ISOLATION**
- **FILTER SKIRT -60 dBc; 15%**
- **70 dB DLVA FOR AMPLITUDE MEASUREMENT**
- **T.S.S.: -75 dBm**
- **-72 dBm TO 0 dBm LOG RANGE**
- **ABSOLUTE ACCURACY PER CHANNEL: +/- 2.0 dB**
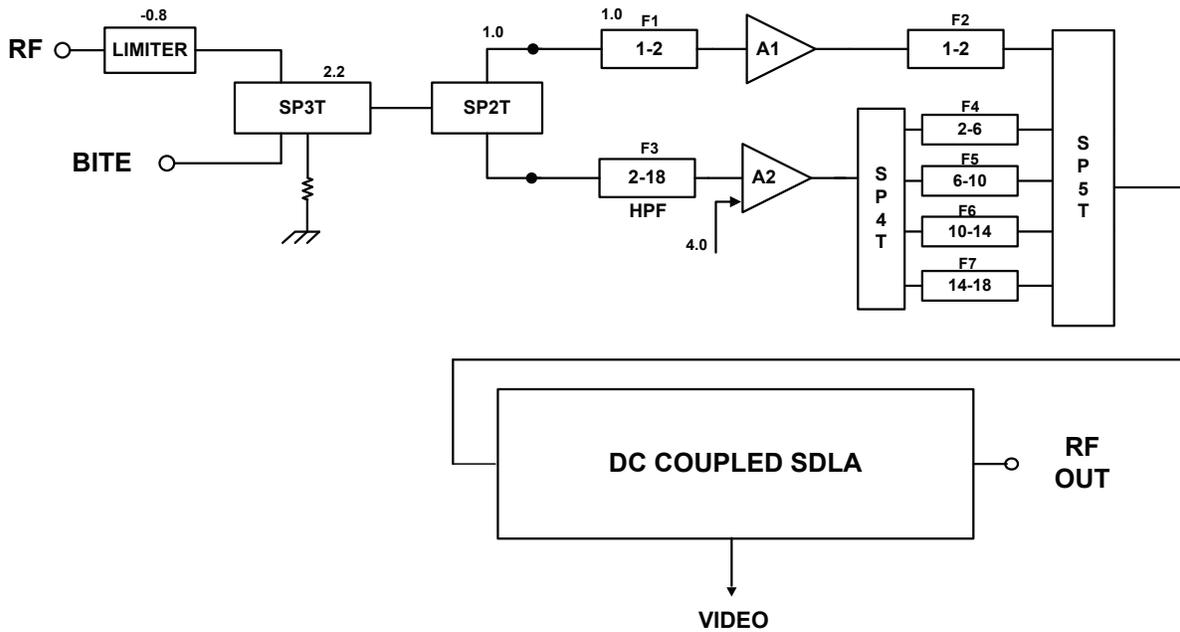- **MATCHING BETWEEN CHANNELS: 2.0 dB P-P**

AKON is a leading manufacturer of a broad range of microwave components and integrated subassemblies in 0.5 to 20.0 GHz range. We specialize in concept through hardware realization of "custom" microwave components and integrated subassemblies (MIC and MMIC). The A20-MH166 is a 5-band RF amplifier and filter-preselector, which channelizes the 1.0 to 18 GHz band into 5 sub-bands of 1.0 to 2.0, 2.0 to 6.0, 6.0 to 10.0, 10.0 to 14.0 and 14.0 to 18.0 GHz. There are two inputs, one for the RF source and the other for a test signal input. the unit provides 35 dB of low noise gain. There is additionally included a DC coupled SDLA with TSS of -75 dBm which provides high speed detected video out. Applications include front-end preselection and video recovery for EW RWR and ELINT receivers. AKON can customize this product to the individual customer's specific requirements.

SPECIFICATIONS:

Model Number	A20-MH166
Frequency Range (GHz)	**1.0 - 18.0 (5 Bands: 1 - 2, 2 - 6, 6 - 10, 10 - 14, 14 - 18)**
Band Overlap (MHz)	**5 (min) from the band edge**
Filter Rejection (dBc)	**-65 (min)**
T.S.S. (dBm)	**-75 (min)**
Dynamic Range (dBm)	**-72 to 0**
Absolute Accuracy (dB)	**+/- 2.0 (nom);+/- 3.0 (max)**
Channel to Channel Isolation (dB)	**65**
Maximum Input Level (dBm)	**+30 (CW)** **+50 (Peak 1.0 us PW @1000 us PRF)**
VSWR	**3.0:1 (max); 2.5:1 (nom)**
Gain (dB)	**35 +/- 3.0**
Output Power (dBm)	**+13**
Harmonics (dBc) (In band)	**-8 (at saturation); -30 (in linear range)**
Band Switching Time (nS) **(Input TTL to 90% of band)**	**300 (max)**
Rise Time (nS) (10% to 90%)	**25**
Settling Time (nS) **(10 % to 0.5 dB of final value)**	**40**
Recovery Time (nS)	**75 (0 dB to –72 dB below peak)**
Power Supply (VDC)	**+12 @ 540 mA; -12 @ 325 mA** **+8 @ 825 mA**

Note: All dimensions are specified in inches (mm)

BLOCK DIAGRAM:

OUTLINE DRAWING: