

Solid State Broadband Driver Amplifier

KS5388



The KS5388 solid state, broadband driver amplifier is ideally suited for use as a broadband driver or moderate power output stage in instrumentation and electronic warfare (EW) simulation, or as a receive amplifier in broadband, high dynamic range receive systems. The KS5388 combines the advantages of high-frequency gallium arsenide (GaAs) device performance and reliability with CAP's state-of-the-art broadband, high power, high temperature co-fired ceramic (HTCC) device packaging to provide a cost-efficient solution with outstanding broadband power amplification. The unit efficiently achieves five watts of power amplification from 6 to 18 GHz and includes a copper heat spreader to optimize heat dissipation and enhance reliability.

Key Features

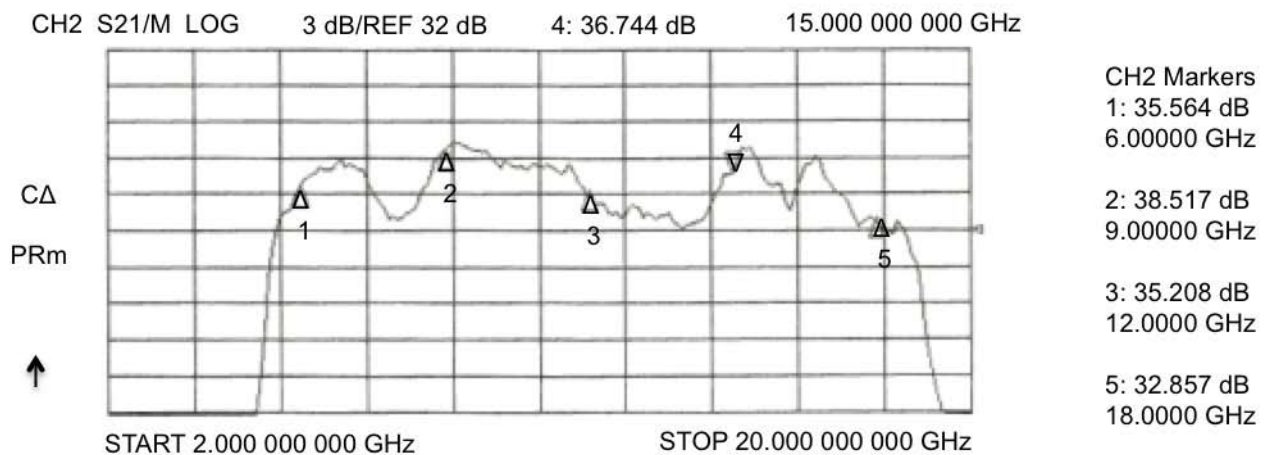
- Broad 6 to 18 GHz bandwidth
- 37 dBm output power
- 35 dB gain
- Solid state monolithic microwave integrated circuit (MMIC) reliability
- Economical, state-of-the-art HTCC device packaging

Typical Applications

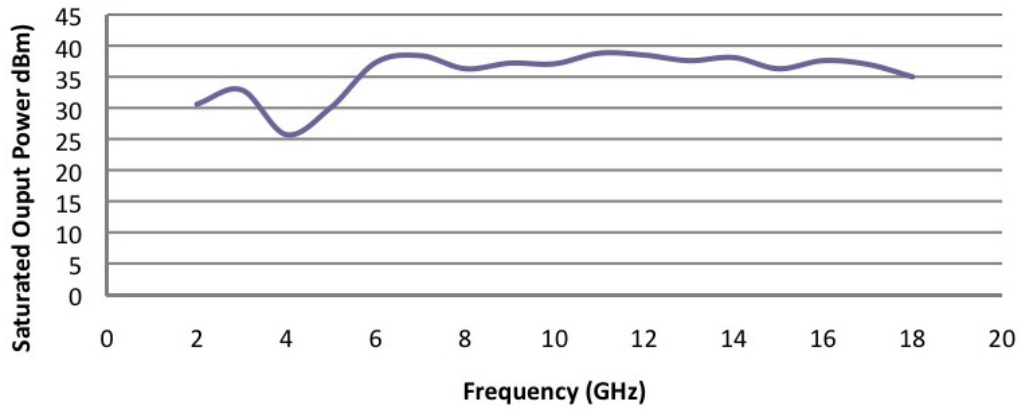
- Electronic warfare (ECM, ECCM)
- Multi-band communication
- Signal simulators
- Instrumentation and test equipment

Electrical Parameters	Units	Min.	Typ.	Max.
10 V, 25°C Baseplate				
Frequency	GHz	6		18
Gain	dB	30	35	
Gain variation, 6-18 GHz	±dB		2	3
Gain variation, over operating temp.	±dB		1	
Input VSWR (50 ohms)			2:1	3:1
Output VSWR (50 ohms)			2:1	3:1
Output power, saturated	watts	3	5	
Output power, 1 dB compressed	watts		4	
Spurious	dBc		-70	
Voltage	volts	9.5	10	12.5
Current	amps		2.6	3.0
Environmental Parameters				
Baseplate temp., operating	°C	-20		+50
Baseplate temp., storage	°C	-20		+125
Cooling			Conduction	
Altitude, operating	K feet		50	
Physical Parameters				
Size	in.	5.0x2.1x0.7		
RF connectors		SMA (F)		
DC connectors		Filter feedthru solder terminal		

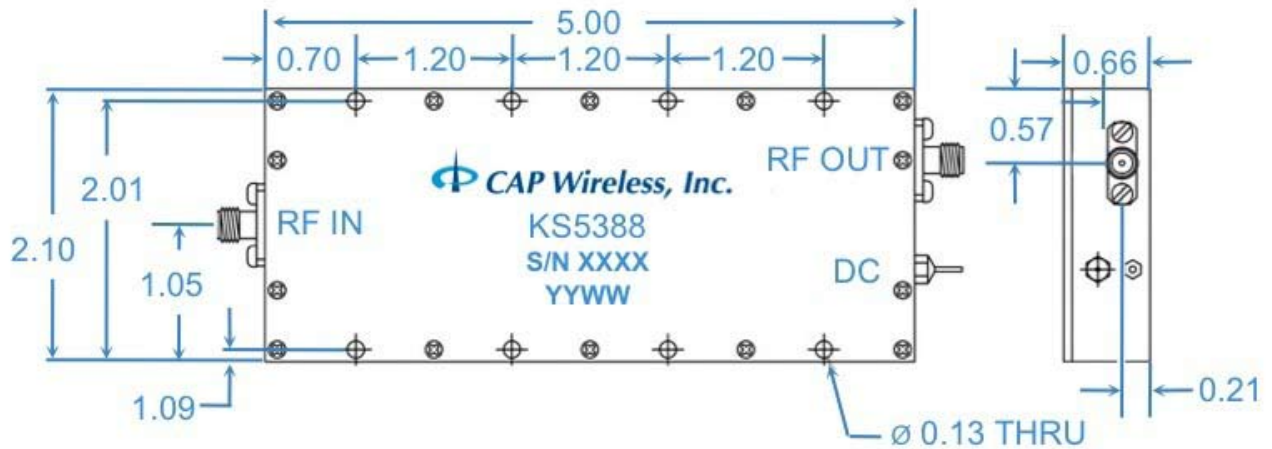
Gain vs. Frequency



Saturated Power vs. Frequency



Outline



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