

## Gain Control Amplifiers

### FEATURES:

- ❖ Coverage From 0.5 to 26.5 GHz
- ❖ 10-20dB Of Gain Control
- ❖ Small Signal Gain of 18-45dB
- ❖ Compact Thin-Film Construction
- ❖ 0-5 Volts @ 20mA Typical



### DESCRIPTION:

### CGC Series

Cernex's CGC series provide a continuously variable gain control over six key wideband frequency ranges, giving the system designer with increased dynamic range and the ability to set the signal levels. The low control current (typically less than 10mA) simplifies control driver requirements. The variable gain control modules are combined with high performance GaAs FET and MMIC fixed-gain modules to provide low noise figure and medium power output over the entire multi-Octave frequency bands.

### SPECIFICATIONS:

Model Number	Frequency Range (GHz)	SS Gain w/o Gain Control (dB) Min.	Gain Control Range (dB) Min	SS Gain Flatness (+/- dB) Max.	Noise Figure		P1DB		VSWR In/Out Max.	Current @ 12-15 VDC	Case Type
					@ No Gain Control (dB) Max.	@ Max Gain Control (dB) Typ	With No Gain Control (dBm) Min.	@ Max. Gain Control (dBm) Typ.			
CGCU5022525	0.5-2.0	25	10	1.00	4.5	-	15	12	2:1	150	MKS4-1
CGCU5024025	0.5-2.0	40	20	1.75	4.5	-	15	12	2:1	320	MKS4-1
CGCU5044030	0.5-4.0	40	20	2.25	4.75	-	15	12	2:1	320	MKS4-1
CGC01184040	1-18	40	20	3.00	5.0	-	15	12	2.3:1	450	MKS4-1
CGC01264045	1-26.5	40	20	3.50	6.5	-	10	8	2.3:1	350	MKS4-1
CGC01404060	1-40	40	20	5.00	7.0	-	10	8	2.3:1	450	MKS4-1
CGC02042520	2-4	25	10	0.75	4.75	-	15	12	2:1	180	MKS4-1
CGC02044020	2-4	40	20	1.50	4.75	-	15	12	2:1	360	MKS4-1
CGC02062530	2-6	25	10	1.0	5.0	-	15	12	2:1	180	MKS4-1
CGC02064030	2-6	40	20	2.25	3.0	-	15	12	2:1	360	MKS4-1
CGC02082535	2-8	25	10	2.0	5.5	-	15	12	2:1	250	MKS4-1
CGC02084035	2-8	40	20	3.0	3.5	-	15	12	2:1	360	MKS4-1
CGC02504070	2-50	40	20	4.0	7.0	-	10	8	2.5:1	300	MKS4-1
CGC04082530	4-8	25	10	1.0	4.0	-	15	12	2:1	180	MKS4-1
CGC04084030	4-8	40	20	1.75	4.0	-	15	12	2:1	350	MKS4-1
CGC04122540	4-12	25	10	1.75	6.0	-	15	12	2:1	180	MKS4-1
CGC04124040	4-12	40	20	2.75	4.0	-	15	12	2:1	360	MKS4-1
CGC05152545	5-15	25	10	1.5	6.5	-	15	12	2:1	180	MKS4-1
CGC05154045	5-15	40	20	2.5	6.5	-	15	12	2:1	360	MKS4-1
CGC06182550	6-18	25	10	1.5	5.0	-	15	12	2:1	180	MKS4-1
CGC06184050	6-18	40	20	2.75	5.0	-	15	12	2:1	360	MKS4-1



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					@ No Gain Control (dB) Max.	@ Max Gain Control (dB) Typ	With No Gain Control (dBm) Min.	@ Max. Gain Control (dBm) Typ.			
CGC08202560	8-20	25	10	1.5	7.0	-	15	12	2:1	250	MKS4-1
CGC08204060	8-20	40	20	2.5	7.0	-	15	12	2:1	450	MKS4-1
CGC17223040	17-22	30	20	1.5	6.0	-	12	10	2:1	250	MKS4-1
CGC18262560	18-26.5	25	10	3.0	6.5	-	13	10	2:1	250	MKS4-1
CGC18264060	18-26.5	40	20	3.0	6.5	-	13	10	2:1	350	MKS4-1
CGC18402560	18-40	25	10	4.5	7.0	-	13	10	2.5:1	250	MKS4-1
CGC18404060	18-40	40	20	4.5	7.0	-	13	10	2.5:1	350	MKS4-1
CGC26402560	26.5-40	25	10	4.0	7.0	-	13	10	2:1	250	MKS4-1
CGC26404060	26.5-40	40	20	4.0	7.0	-	13	10	2:1	350	MKS4-1
CGC40604070	40-60	40	20	4.5	8.0	-	8	6	2.5:1	350	MCV4-1

ALL THE ABOVE SPECIFICATIONS ARE @ 25°C.  
 OTHER FREQUENCY BANDS, HIGHER GAIN & POWER LEVELS ARE ALSO AVAILABLE.  
 CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE