

# 2.0 to 8.0 GHz Power Amplifiers

Model	Frequency Response (GHz)	Gain (dB)		Gain versus Temperature at any Frequency ( $\pm$ dB)	Noise Figure (dB)	Power Output for 1dB Compression (+dBm)	Gain Flatness vs Freq ( $\pm$ dB)	3rd Order Intercept Point (+dBm)	Input (1) DC current @ +12V (mA)		Case Type
		Min	Max						Typ	Max	
<b>Power Amplifiers with Guaranteed Specifications at +25°C</b>											
CPA-4-2002	2-4	19	-	-	5.5	23	1.50	32	260	280	SC2
CPA-4-2003	2-4	30	-	-	4.5	23	1.25	32	320	350	SC4
CPA-4-2004	2-4	41	-	-	4.5	23	1.50	32	380	450	SC6
CPA-6-2002	2-6	24	-	-	5.5	23	0.75	32	250	280	SC2
CPA-6-2003	2-6	35	-	-	4.5	23	1.00	32	310	345	SC4
CPA-6-2004	2-6	46	-	-	4.5	23	1.50	32	370	410	SC4
CPA-8-2002	2-8	19	-	-	6.0	23	1.50	32	250	280	SC2
CPA-8-2003	2-8	28	-	-	5.0	23	1.50	32	300	330	SC4
CPA-8-2004	2-8	37	-	-	5.0	23	1.50	32	350	385	SC4
CPA-8-2012	2-8	17	-	-	10.0	27	1.00	34	650	750	PCEL6
CPA-8-2013	2-8	27	-	-	8.0	27	1.25	34	600	800	PCEL6
CPA-8-2014	2-8	37	-	-	6.0	27	1.50	34	750	850	PCEL6
CPA-8-2023	2-8	16	-	-	15.0	30	1.25	36	1820	2120	HPX8
CPA-8-2024	2-8	27	-	-	8.0	30	1.50	36	2000	2300	HPX8
CPA-8-2025	2-8	37	-	-	6.0	30	1.75	36	2050	2350	HPX8
CPA-8-2026	2-8	48	-	-	5.5	30	1.75	36	2100	2400	HPX8
CPA-8-4002	4-8	18	-	-	6.0	23	1.00	32	250	280	SC2
CPA-8-4003	4-8	28	-	-	5.0	23	1.00	32	310	345	SC4
CPA-8-4004	4-8	38	-	-	5.0	23	1.50	32	370	410	SC4

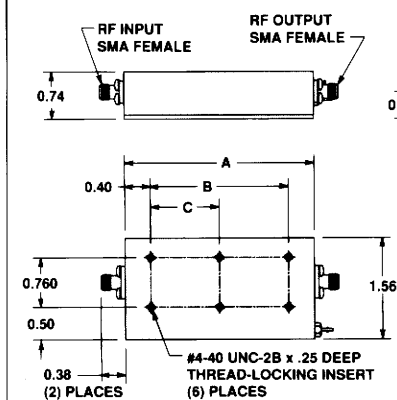
**NOTES:**

1. All amplifiers incorporate a voltage regulator capable of working over a +12 to +18 VDC range. When operating at elevated temperatures with high current drain amplifiers, +12 VDC is recommended. Contact factory if higher input voltage is required at elevated temperatures.

- Maximum input power without damage for all amplifiers is +20 dBm CW.
- All specified temperatures are case temperatures. All amplifiers should be properly mounted to ensure adequate heat sinking during operation.
- Input and output VSWRs are 2.0:1 Max for all amplifiers listed.

## Package Outlines

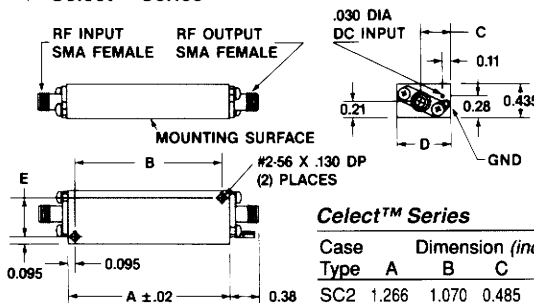
### HPX-Series



#### HPX-Series

Case Type	Dimension (inches)		
	A	B	C
HPX8	2.930	2.132	1.066

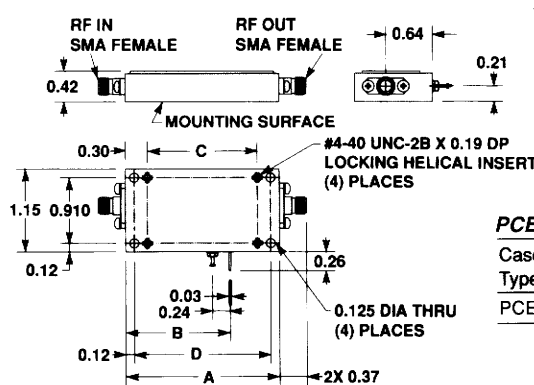
### ▼ Celect™ Series



#### Celect™ Series

Case Type	Dimension (inches)				
	A	B	C	D	E
SC2	1.266	1.070	0.485	0.80	0.610
SC4	1.932	1.742	0.485	0.80	0.610
SC6	2.598	2.408	0.485	0.80	0.610

### ▼ PCEL Series



#### PCEL Series

Case Type	Dimension (inches)			
	A	B	C	D
PCEL6	2.10	1.43	1.500	1.860

DIMENSIONS IN INCHES  
TOLERANCES: XX  $\pm$ 0.02  
XXX  $\pm$ 0.010

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# CELERITEK