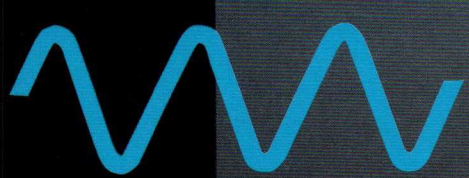
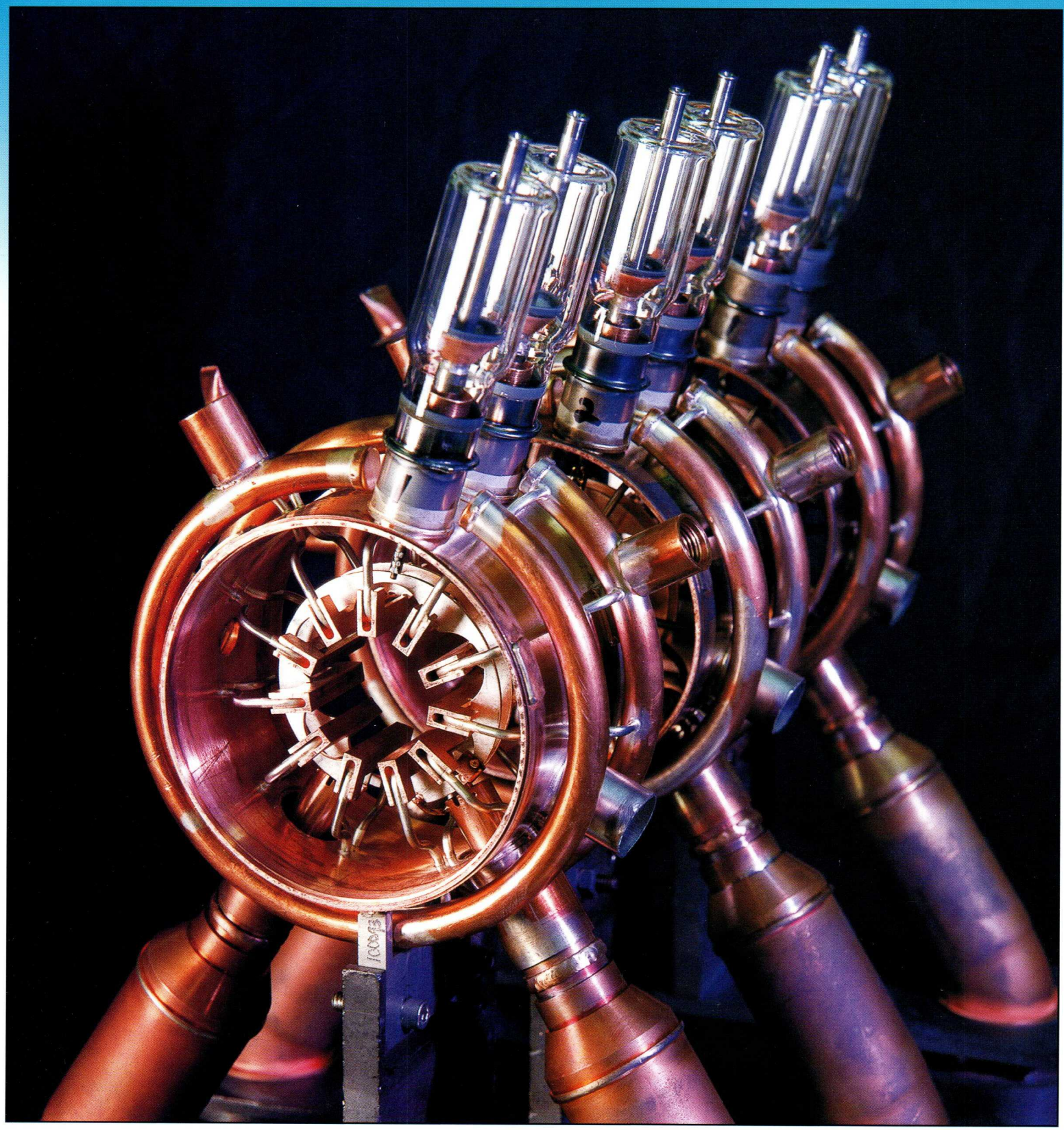
Litton CFAs



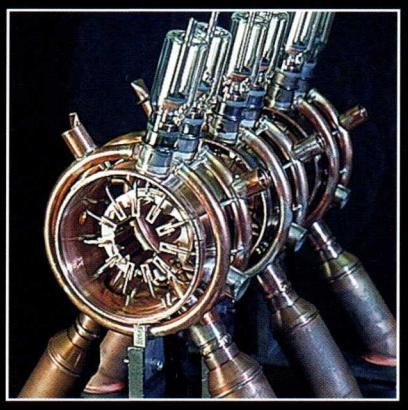


CFA PRODUCT LINE

TYPE	FREQUENCY RANGE (GHz)	PEAK POWER* ** kW	DUTY CYCLE*	NOMINAL GAIN* (dB)	EFFICIENCY %	BANDWIDTH %	PULSE WIDTH* (msec)	INSERTION LOSS (dB)	SPURIOUS NOISE (dB)
L-4806	1.25-1.35	100	.032	13.5	55	6.5	40	3.0	-40
L-4939/4940	1.25-1.35	550	.0024	12.7	42	6.7	3	N/A	-35
L-4953	1.28-1.35	5300	.001	11.2	54	6.2	1.8	1.0	-35
L-4924	L BAND	150	.005	10	44	6.5	7	1.5	-40
L-4925	L BAND	1250	.004	10	49	6.5	5	1.5	-35
L-4717	2.9-3.1	60	.028	16	60	6.67	35	0.4	-35
L-4767	2.9-3.1	60	.028	16	45	6.67	36	2.0	-40
L-4769	2.9-3.1	140	.003	19.7	42	6.67	3.0	1.0	-30
L-4719	2.9-3.1	525/2200	.025/.0125	10/7	60	6.67	28	1.0	-35
L-4718	2.9-3.1	666	.0148	11	60	6.67	30	1.0	-35
L-4716	2.9-3.1	666	.015	11	66	6.67	30	1.0	-40
L-4829	2.9-3.1	2200	.0056	7.0	60	6.67	28	1.0	-30
L-4765	2.9-3.1	2600	.0053	7	60	6.67	28	1.0	-35
L-4821	2.99-3.51	125	.016	14	40	13.0	40	1.5	-40
L-4756	3.09-3.51	1200	.025	10	50	12.7	110	2.0	-40
L-4762	3.1-3.5	125	.016	16	40	12.1	16	2.0	-40
L-4927A	5255-5755	500	.02	10	56	10	45	1.5	-40
L-4822	5.4-5.9	630/1250	.01/.0056	10.2/7.0	60	10.0	37/35	2.0	-40
L-4750	9.0-9.2	300	.004	14.0	45	2.1	1.5	1.5	-35
L-4934	9500-9800	100	.014	13.5	46	3.1	3.5	1.4	-40
L-4764	9.5-10.0	500	.0011	12	39	5.1	2	1.3	-35

* Multiple specifications of peak power, duty cycle, nominal gain, and pulse width indicate two modes of operation.

** Output peak power is expressed as "minimum" over the specific band.



Crossed-field amplifiers are characterized by moderate gain, moderate bandwidth, high efficiency, saturated amplification, and small size. CFAs offer low weight in comparison with other microwave tubes performing the same function.

The rapid growth in the use of CFAs reflects the commitment by Litton Electron Devices to improving technology and responding to customers' needs. A CFA should be selected on the basis of suitability for the application. In many cases, a particular need will override all other considerations, since each system requirement is unique.

CFAs produced by Litton generate output signals of high power over broad frequency bandwidths with unusually good efficiency and phase coherency. Their low operating voltages and compact size make CFAs attractive for mobile, airborne, and distributed phased array radar applications.

Litton manufactures a wide range of CFAs available at low and high peak power outputs in either forward-wave or backward-wave formats in L, S, C, and X-Bands. Litton also can repair almost any CFA.

At Litton, the latest technology serves as a starting point for continuous innovation. Litton employs the industry's most experienced CFA engineers and has made substantial investments in its manufacturing, assembly, and testing operations to enhance CFA performance.

These efforts have resulted in such advancements as liquid-cooled platinum cathodes that provide long life and stable performance with virtually no arcing; better material processing techniques and improved circuit design that have produced up to 20 dB gain; tighter coupling between the slow-wave structure and the external load that has improved electronic efficiency, reduced RF voltage, and improved pulse stability; increased efficiencies beyond 60 to 70 percent; and improved noise performance.

Litton's success at enhancing the CFA's performance has expanded its use in applications traditionally dominated by other microwave devices. For instance, greater pulse stability, phase stability, and efficiency have made the CFA an ideal choice for advanced phased array systems such as the AN/SPY-1 radar in the AEGIS system. CFAs also are practical for systems requiring multimode operation.

SALES OFFICES

NORTHEAST
P.O. Box 382
Westford, Massachusetts 01886
(508) 692-6220

SOUTHEAST
1600 Watson Boulevard
Suite #05
P.O. Box 5040
Warner Robins, Georgia 31099-5040
(912) 923-3397

MID-ATLANTIC
P.O. Box 516
Springfield, New Jersey 07081-0516
(201) 379-3131

SOUTHWEST
15150 Preston Road
Suite 300
Dallas, Texas 75248
(214) 991-0822

EAST
9515 Deereco Road
Suite #500
Timonium, Maryland 21093
(410) 560-0364
FAX (410) 561-9944

WEST
960 Industrial Road
San Carlos, California 94070
(415) 591-8411 x 2228
FAX (415) 591-5623

MIDWEST
4130 Linden Avenue #232
Dayton, Ohio 45432
(513) 256-6969
FAX (513) 256-6993

INTERNATIONAL

Litton Precision Products International

AUSTRALIA
414 Gardeners Road
P.O. Box 253
Rosebery, N.S.W. 2018, Australia
61-2-669-6111
FAX 61-2-693-5048

ENGLAND
6 First Avenue
Globe Park, Marlow
Buckinghamshire, SL7 1YA,
United Kingdom
44-1-628-486060
FAX 44-1-628-472438

FRANCE
58 rue Pottier
78150 Le Chesnay, France
33-1-39-552104
FAX 33-1-39-555068

GERMANY
Oberföhringe Strasse 8
D-81679 München, Germany
49-89-92204
FAX 089-92204-113

ITALY S.p.A
Viale Fulvio Testi, 126
I-20092 Cinisello Balsamo
Milan, Italy
39-2-2440421
FAX 39-2-2440669

THE NETHERLANDS
Benelux Office
Griendstraat 10
NL-2921 La Krimpen a/d Yssel,
The Netherlands
31-1807-18555
FAX 31-1807-16624

SPAIN
Condes del Val 8
28036 Madrid, Spain
34-1-344-0144
FAX 34-1-344-0102

SWEDEN
Hellosvagen - 1C
Box 92146
S-120-8
Stockholm, Sweden
46-8-7430585
FAX 46-8-6435220

SWITZERLAND
Gubelstrasse 28
8050 Zurich, Switzerland
41-1-313-1001
FAX 41-1-313-1255

INDIA
Blue Star Limited
Blue Star House
11-A Magarath Road
Bangalorr 560 025
80-558-9653
FAX 80-558-4599

PAKISTAN
Consolidated Logistics Corp.
P.O. Box 13549
Suite 1009-1010 Uni Centre
I.I. Chundrigar Road
Karachi-74000, Pakistan
21-243-7363
FAX 21-243-7364

CANADA
Victrix Limited
P.O. Box 1807
Guelph, Ontario, Canada N1H 7A1
(519) 836-1480
FAX (519) 836-4693

ISRAEL
MTI Engineering Ltd.
P.O. Box 43066
Tel Aviv 61430, Israel
972-3-492101
FAX 972-364-87930

JAPAN
Litton-Westrex Company, Japan
2-1-2, Marunouchi
Chiyoda-ku, Tokyo 100
Japan
(81) 3-3211-6791
FAX (81) 3-3211-6797

KOREA
Stellar International SA.
CPO Box 8736
Seoul 100-687
Korea
82-2-713-1777
FAX 82-2-717-5656

REPUBLIC OF CHINA
Comtech Systems Corporation
12th floor, 166, Fu-Hsing North Road
Taipei, Taiwan 10440, Republic of China
(883) 2-713-3713/(886) 2-712-3591
FAX (886) 2-718-8036

Litton

Electron Devices

1035 Westminster Drive
Williamsport, PA 17701
Phone (717) 326-3561 or TLX 84-1430
FAX (717) 326-2903