

QUALIFIED PRODUCTS LIST
OF
PRODUCTS QUALIFIED UNDER PERFORMANCE SPECIFICATION
MIL-PRF-3098
CRYSTAL UNITS, QUARTZ
GENERAL SPECIFICATION FOR

This list has been prepared for use by or for the Government in the acquisition of products covered by Specification MIL-PRF-3098. Listing of a product is not intended to and does not connote endorsement of the product by the Department of Defense. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. The listing of a product does not release the supplier from compliance with the specification requirements.

The activity responsible for this QPL is the Defense Supply Center Columbus (DSCC-VQ), Columbus, OH 43216-5000.

NOTE: * PLUS (+) FREQUENCY TO BE ADDED TO ALL M3098 PART NUMBERS.



GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI- CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
*CR5/U 2M000000 thru 10M00000	CR5/U + Frequency	3098-35-71	/77	Bliley Electric Company
*CR5/U 2M000000 thru 10M00000	CR5/U + Frequency	QA-118/ALD3, 11 Dec 1967	/77	Croven, Ltd.
*CR5/U 2M000000 thru 10M00000	CR5/U + Frequency	3098-654-67	/77	M-tron Industries, Inc.
*CR5/U 2M000000 thru 10M00000	CR5/U + Frequency	3098-607-74	/77	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR5/U 2M000000 thru 10M00000	CR5/U + Frequency	3098-481-82	/77	Valpey-Fisher Corporation
*CR6/U 2M000000 thru 10M00000	CR6/U + Frequency	3098-35-71	/78	Bliley Electric Company
*CR6/U 2M000000 thru 10M00000	CR6/U + Frequency	QA-118-ALD3, 11 Dec 1967	/78	Croven, Ltd.
*CR6/U 2M000000 thru 10M00000	CR6/U + Frequency	3098-654-67	/78	M-tron Industries, Inc.
*CR6/U 2M000000 thru 10M00000	CR6/U + Frequency	3098-607-74	/78	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR6/U 2M000000 thru 10M00000	CR6/U + Frequency	3098-481-82	/78	Valpey-Fisher Corporation
*CR8/U 1M000000 thru 10M00000	CR8/U + Frequency	3098-35-71	/111	Bliley Electric Company
*CR8/U 1M000000 thru 10M00000	CR8/U + Frequency	QA-118/ALD3, 11 Dec 1967	/111	Croven, Ltd.
*CR8/U 1M000000 thru 10M00000	CR8/U + Frequency	3098-654-67	/111	M-tron Industries, Inc.

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*CR8/U 1M000000 thru 10M00000	CR8/U + Frequency	3098-607-74	/111	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR8/U 1M000000 thru 10M00000	CR8/U + Frequency	3098-481-82	/111	Valpey-Fisher Corporation
*CR18/U 920K0000 thru 20M00000	CR18/U + Frequency	3098-35-71	/3	Bliley Electric Company
*CR18/U 1M000000 thru 20M00000	CR18/U + Frequency	QA-118/ALD3, 11 Dec 1967	/3	Croven, Ltd.
*CR18/U 1M000000 thru 20M00000	CR18/U + Frequency	3098-654-67	/3	M-tron Industries, Inc.
*CR18/U 1M000000 thru 20M00000	CR18/U + Frequency	3098-821-80	/3	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR18/U 1M000000 thru 20M00000	CR18/U + Frequency	3098-692-79	/3	U. S. Crystal Corporation
*CR18/U 800K0000 thru 20M00000	CR18/U + Frequency	3098-481-82	/3	Valpey-Fisher Corporation
*CR19/U 920K0000 thru 20M00000	CR19/U + Frequency	3098-35-71	/4	Bliley Electric Company
*CR19/U 1M000000 thru 20M00000	CR19/U + Frequency	QA-118/ALD3, 11 Dec 1967	/4	Croven, Ltd.
*CR19/U 1M000000 thru 20M00000	CR19/U + Frequency	3098-654-67	/4	M-tron Industries, Inc.
*CR19/U 1M000000 thru 20M00000	CR19/U + Frequency	3098-607-74	/4	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR19/U 1M000000 thru 20M00000	CR19/U + Frequency	3098-692-79	/4	U. S. Crystal Corporation
*CR19/U 800K0000 thru 20M00000	CR19/U + Frequency	3098-481-82	/4	Valpey-Fisher Corporation
*CR25B/U 200K0000 thru 555K0000	CR25B/U + Frequency	3098-34-71	/7	Bliley Electric Company
*CR26/U 200K0000 thru 500K0000	CR26/U + Frequency	3098-32-71	/8	Bliley Electric Company
*CR27/U 920K0000 thru 20M00000	CR27/U + Frequency	3098-33-71	/9	Bliley Electric Company
*CR27/U 1M000000 thru 20M00000	CR27/U + Frequency	3098-655-67	/9	M-tron Industries, Inc.
*CR27/U 1M000000 thru 20M00000	CR27/U + Frequency	3098-1095-64	/9	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR27/U 1M000000 thru 20M00000	CR27/U + Frequency	3098-692-79	/9	U. S. Crystal Corporation

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*CR27/U 800K0000 thru 20M00000	CR27/U + Frequency	3098-481-82	/9	Valpey-Fisher Corporation
*CR28/U 920K0000 thru 20M00000	CR28/U + Frequency	3098-33-71	/10	Bliley Electric Company
*CR28/U 1M000000 thru 20M00000	CR28/U + Frequency	3098-655-67	/10	M-tron Industries, Inc.
*CR28/U 1M000000 thru 20M00000	CR28/U + Frequency	3098-1095-64	/10	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR28/U 1M000000 thru 20M00000	CR28/U + Frequency	3098-692-79	/10	U. S. Crystal Corporation
*CR28/U 800K0000 thru 20M00000	CR28/U + Frequency	3098-481-82	/10	Valpey-Fisher Corporation
*CR33/U 10M00000 thru 30M00000	CR33/U + Frequency	3098-512-78	/14	Bliley Electric Company
*CR35/U 920K0000 thru 20M00000	CR35/U + Frequency	3098-33-71	/15	Bliley Electric Company
*CR35/U 1M000000 thru 20M00000	CR35/U + Frequency	3098-655-67	/15	M-tron Industries, Inc.
*CR35/U 1M000000 thru 20M00000	CR35/U + Frequency	3098-1095-64	/15	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR35/U 800K0000 thru 20M00000	CR35/U + Frequency	3098-481-82	/15	Valpey-Fisher Corporation
*CR36/U 920K0000 thru 20M00000	CR36/U + Frequency	3098-33-71	/16	Bliley Electric Company
*CR36/U 1M000000 thru 20M00000	CR36/U + Frequency	3098-655-67	/16	M-tron Industries, Inc.
*CR36/U 1M000000 thru 20M00000	CR36/U + Frequency	3098-1095-64	/16	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR36/U 800K0000 thru 20M00000	CR36/U + Frequency	3098-481-82	/16	Valpey-Fisher Corporation
*CR37/U 90K00000 thru 250K0000	CR37/U + Frequency	3098-29-71	/17	Bliley Electric Company
*CR42/U 90K00000 thru 250K0000	CR42/U + Frequency	3098-30-71	/21	Bliley Electric Company
*CR45/U 455K0000 thru 0	CR45/U + Frequency	3098-31-71	/24	Bliley Electric Company
*CR46B/U 200K0000 thru 550K0000	CR46B/U + Frequency	3098-34-71	/25	Bliley Electric Company

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*CR47/U 190K0000 thru 500K0000	CR47/U + Frequency	3098-32-71	/26	Bliley Electric Company
*CR52/U 15M00000 thru 61M00000	CR52/U + Frequency	QA-152/D3, 22 Apr 1968	/30	Croven, Ltd.
*CR52/U 10M00000 thru 61M00000	CR52/U + Frequency	3098-833-67	/30	M-tron Industries, Inc.
*CR52/U 10M00000 thru 61M00000	CR52/U + Frequency	3098-1148-65	/30	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR52/U 10M00000 thru 61M00000	CR52/U + Frequency	*CR148/U	/30	U. S. Crystal Corporation
*CR54/U 50M00000 thru 125M0000	CR54/U + Frequency	3098-995-78	/32	U. S. Crystal Corporation
*CR54/U 50M00000 thru 125M0000	CR54/U + Frequency	3098-479-82	/32	Valpey-Fisher Corporation
*CR55/U 24M00000 thru 62M00000	CR55/U + Frequency	QA-277/LD3, 4 Jan 1968	/33	Croven, Ltd.
*CR55/U 18M00000 thru 61M00000	CR55/U + Frequency	3098-815-67, 3098-154-84	/33	Electro Dynamics Crystal Corporation
*CR55/U 17M00000 thru 61M00000	CR55/U + Frequency	3098-280-73	/33	M-tron Industries, Inc.
*CR55/U 17M00000 thru 62M00000	CR55/U + Frequency	3098-1091-64	/33	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR55/U 17M00000 thru 62M00000	CR55/U + Frequency	3098-698-79	/33	U. S. Crystal Corporation
*CR55/U 17M00000 thru 62M00000	CR55/U + Frequency	3098-484-82	/33	Valpey-Fisher Corporation
*CR56/U 50M00000 thru 125M0000	CR56/U + Frequency	QA-180/D3, 28 Jan 1969,	/34	Croven, Ltd.
*CR56/U 50M00000 thru 125M0000	CR56/U + Frequency	3098-520-68	/34	Electro Dynamics Crystal Corporation
*CR56/U 50M00000 thru 125M0000	CR56/U + Frequency	3098-1092-64	/34	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR56/U 50M00000 thru 125M0000	CR56/U + Frequency	3098-482-82	/34	U. S. Crystal Corporation
*CR56/U 50M00000 thru 125M0000	CR56/U + Frequency	3098-482-82	/34	Valpey-Fisher Corporation
*CR58/U 920K0000 thru 20M00000	CR58/U + Frequency	3098-35-71	/36	Bliley Electric Company

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*CR58/U 1M000000 thru 20M00000	CR58/U + Frequency	QA-118/ALD3, 11 Dec 1967	/36	Croven, Ltd.
*CR58/U 1M000000 thru 20M00000	CR58/U + Frequency	3098-654-67	/36	M-tron Industries, Inc.
*CR58/U 1M000000 thru 20M00000	CR58/U + Frequency	3098-1095-64	/36	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR58/U 800K0000 thru 20M00000	CR58/U + Frequency	3098-481-82	/36	Valpey-Fisher Corporation
*CR59/U 50M00000 thru 125M0000	CR59/U + Frequency	QA-559/LS3, 8 Jul 1968	/37	Croven, Ltd.
*CR59/U 50M00000 thru 125M0000	CR59/U + Frequency	3098-520A-68	/37	Electro Dynamics Crystal Corporation
*CR59/U 50M00000 thru 125M0000	CR59/U + Frequency	3098-997-78	/37	U. S. Crystal Corporation
*CR59/U 50M00000 thru 125M0000	CR59/U + Frequency	3098-482-82	/37	Valpey-Fisher Corporation
*CR60/U 5M000000 thru 20M00000	CR60/U + Frequency	3098-281-79	/38	Bliley Electric Company
*CR60/U 5M000000 thru 20M00000	CR60/U + Frequency	QA-690/E2, 2 Dec 1971	/38	Croven, Ltd.
*CR60/U 5M000000 thru 20M00000	CR60/U + Frequency	3098-450-76	/38	Electro Dynamics Crystal Corporation
*CR60/U 5M000000 thru 20M00000	CR60/U + Frequency	3098-261-68	/38	M-tron Industries, Inc.
*CR60/U 5M000000 thru 20M00000	CR60/U + Frequency	3098-494-66	/38	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR60/U 5M000000 thru 20M00000	CR60/U + Frequency	3098-996-78	/38	U. S. Crystal Corporation
*CR60/U 5M000000 thru 20M00000	CR60/U + Frequency	3098-480-82	/38	Valpey-Fisher Corporation
*CR61/U 24M00000 thru 61M00000	CR61/U + Frequency	QA-277/LD3, 4 Jan 1968	/39	Croven, Ltd.
*CR61/U 18M00000 thru 61M00000	CR61/U + Frequency	3098-814-67, 3098-154-84	/39	Electro Dynamics Crystal Corporation
*CR61/U 17M00000 thru 61M00000	CR61/U + Frequency	3098-484-82	/39	Valpey-Fisher Corporation
*CR62/U 920K0000 thru 20M00000	CR62/U + Frequency	3098-33-71	/40	Bliley Electric Company
*CR62/U 1M000000 thru 20M00000	CR62/U + Frequency	3098-655-67	/40	M-tron Industries, Inc.

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*CR62/U 1M000000 thru 20M00000	CR62/U + Frequency	3098-1095-64	/40	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR62/U 800K0000 thru 20M00000	CR62/U + Frequency	3098-481-82	/40	Valpey-Fisher Corporation
*CR63B/U 200K0000 thru 555K0000	CR63B/U + Frequency	3098-34-71	/41	Bliley Electric Company
*CR64/U 3M700000 thru 20M00000	CR64/U + Frequency	QA-690/E2, 2 Dec 1971	/42	Croven, Ltd.
*CR64/U 2M400000 thru 20M00000	CR64/U + Frequency	3098-450-76	/42	Electro Dynamics Crystal Corporation
*CR64/U2 2M400000 thru 20M00000	CR64/U + Frequency	3098-261-68	/42	M-tron Industries, Inc.
*CR64/U 2M400000 thru 20M00000	CR64/U + Frequency	3098-657-86	/42	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR64/U 2M900000 thru 20M00000	CR64/U + Frequency	3098-996-78	/42	U. S. Crystal Corporation
*CR64/U 2M900000 thru 20M00000	CR64/U + Frequency	3098-480-82	/42	Valpey-Fisher Corporation
*CR65/U 15M00000 thru 61M00000	CR65/U + Frequency	QA-165/L3, 5 Jan 1970	/43	Croven, Ltd.
*CR65/U 10M00000 thru 61M00000	CR65/U + Frequency	3098-833-67	/43	M-tron Industries, Inc.
*CR65/U 10M00000 thru 61M00000	CR65/U + Frequency	3098-1148-65	/43	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR65/U 10M00000 thru 61M00000	CR65/U + Frequency	*CR148/U	/43	U. S. Crystal Corporation
*CR67/U 24M00000 thru 62M00000	CR67/U + Frequency	QA-277/LD3, 4 Jan 1968	/45	Croven, Ltd.
*CR67/U 18M00000 thru 62M00000	CR67/U + Frequency	3098-815-67, 3098-154-84	/45	Electro Dynamics Crystal Corporation
*CR67/U 17M00000 thru 61M00000	CR67/U + Frequency	3098-280-73	/45	M-tron Industries, Inc.
*CR67/U 17M00000 thru 62M00000	CR67/U + Frequency	3098-1091-64	/45	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR67/U 17M00000 thru 62M00000	CR67/U + Frequency	3098-693-79	/45	U. S. Crystal Corporation
*CR67/U 17M00000 thru 62M00000	CR67/U + Frequency	3098-484-82	/45	Valpey-Fisher Corporation
*CR69/U 3M700000 thru 25M00000	CR69/U + Frequency	QA-690/E2, 2 Dec 1971	/47	Croven, Ltd.

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*CR69/U 2M900000 thru 25M00000	CR69/U + Frequency	3098-450-76	/47	Electro Dynamics Crystal Corporation
*CR69/U 2M900000 thru 25M00000	CR69/U + Frequency	3098-494-66	/47	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR69/U 2M900000 thru 25M00000	CR69/U + Frequency	3098-996-78	/47	U. S. Crystal Corporation
*CR69/U 2M900000 thru 25M00000	CR69/U + Frequency	3098-480-82	/47	Valpey-Fisher Corporation
*CR71/U 4M999995 thru 5M50000	BG61AH-5 + Frequency	3098-235-69	/49	Bliley Electric Company
*CR72/U 24M00000 thru 61M00000	CR72/U + Frequency	QA-277/LD3, 4 Jan 1968	/50	Croven, Ltd.
*CR72/U 18M00000 thru 61M00000	CR72/U + Frequency	3098-815-67, 3098-154-84	/50	Electro Dynamics Crystal Corporation
*CR72/U 17M00000 thru 61M00000	CR72/U + Frequency	3098-280-73	/50	M-tron Industries, Inc.
*CR72/U 17M00000 thru 61M00000	CR72/U + Frequency	3098-1091-64	/50	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR72/U 17M00000 thru 61M00000	CR72/U + Frequency	3098-484-82	/50	Valpey-Fisher Corporation
*CR73/U 17M00000 thru 61M00000	CR73/U + Frequency	3098-1669-64	/54	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR74/U 45M00000 thru 125M0000	CR74/U + Frequency	3098-1129-86	/51	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR75/U 50M00000 thru 125M0000	CR75/U + Frequency	3098-995-78	/52	U. S. Crystal Corporation
*CR75/U 50M00000 thru 125M00000	CR75/U + Frequency	3098-479-92	/52	Valpey-Fisher Corporation
*CR76/U 24M00000 thru 61M00000	CR76/U + Frequency	QA-277/LD3, 4 Jan 1968	/53	Croven, Ltd.
*CR76/U 18M00000 thru 61M00000	CR76/U + Frequency	3098-154-84	/53	Electro Dynamics Crystal Corporation
*CR76/U 16M00000 thru 61M00000	CR76/U + Frequency	3098-280-73	/53	M-tron Industries, Inc.
*CR76/U 16M00000 thru 61M00000	CR76/U + Frequency	3098-1105-86	/53	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR76/U 16M00000 thru 61M00000	CR76/U + Frequency	3098-693-79	/53	U. S. Crystal Corporation

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*CR76/U 16M00000 thru 61M00000	CR76/U + Frequency	3098-484-82	/53	Valpey-Fisher Corporation
*CR77/U 24M00000 thru 62M00000	CR77/U + Frequency	QA-277/LD3, 4 Jan 1968	/55	Croven, Ltd.
*CR77/U 18M00000 thru 62M00000	CR77/U + Frequency	3098-815-67, 3098-154-84	/55	Electro Dynamics Crystal Corporation
*CR77/U 17M00000 thru 61M00000	CR77/U + Frequency	3098-280-73	/55	M-tron Industries, Inc.
*CR77/U 17M00000 thru 62M00000	CR77/U + Frequency	3098-1091-64	/55	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR77/U 17M00000 thru 62M00000	CR77/U + Frequency	3098-693-79	/55	U. S. Crystal Corporation
*CR77/U 17M00000 thru 62M00000	CR77/U + Frequency	3098-484-82	/55	Valpey-Fisher Corporation
*CR78/U 3M700000 thru 20M00000	CR78/U + Frequency	QA-690/E2, 2 Dec 1971	/62	Croven, Ltd.
*CR78/U 2M200000 thru 20M00000	CR78/U + Frequency	3098-450-76	/62	Electro Dynamics Crystal Corporation
*CR78/U 2M200000 thru 20M00000	CR78/U + Frequency	3098-261-68	/62	M-tron Industries, Inc.
*CR78/U 2M200000 thru 20M00000	CR78/U + Frequency	3098-494-66	/62	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR78/U 2M900000 thru 20M00000	CR78/U + Frequency	3098-996-78	/62	U. S. Crystal Corporation
*CR78/U 2M200000 thru 20M00000	CR78/U + Frequency	3098-480-82	/62	Valpey-Fisher Corporation
*CR79/U 3M700000 thru 20M00000	CR79/U + Frequency	QA-690/E2, 2 Dec 1971	/63	Croven, Ltd.
*CR79/U 2M900000 thru 20M00000	CR79/U + Frequency	3098-450-76	/63	Electro Dynamics Crystal Corporation
*CR79/U 2M900000 thru 20M00000	CR79/U + Frequency	3098-261-68	/63	M-tron Industries, Inc.
*CR79/U 2M900000 thru 20M00000	CR79/U + Frequency	3098-494-66	/63	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR79/U 2M900000 thru 20M00000	CR79/U + Frequency	3098-996-78	/63	U. S. Crystal Corporation
*CR79/U 2M900000 thru 20M00000	CR79/U + Frequency	3098-480-82	/63	Valpey-Fisher Corporation
*CR80/U 50M00000 thru 125M0000	CR80/U + Frequency	QA-180/D3, 28 Jan 1969	/57	Croven, Ltd.

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI- CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
*CR80/U 50M00000 thru 125M0000	CR80/U + Frequency	3098-520-68	/57	Electro Dynamics Crystal Corporation
*CR80/U 50M00000 thru 125M0000	CR80/U + Frequency	3098-1092-64	/57	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR80/U 50M00000 thru 125M0000	CR80/U + Frequency	3098-997-78	/57	U. S. Crystal Corporation
*CR80/U 50M00000 thru 125M0000	CR80/U + Frequency	3098-482-82	/57	Valpey-Fisher Corporation
*CR81/U 24M00000 thru 62M00000	CR81/U + Frequency	QA-277/LD3, 4 Jan 1968	/58	Croven, Ltd.
*CR81/U 18M00000 thru 61M00000	CR81/U + Frequency	3098-815-67, 3098-154-84	/58	Electro Dynamics Crystal Corporation
*CR81/U 17M00000 thru 61M00000	CR81/U + Frequency	3098-280-73	/58	M-tron Industries, Inc.
*CR81/U 17M00000 thru 62M00000	CR81/U + Frequency	3098-1091-64	/58	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR81/U 17M00000 thru 65M00000	CR81/U + Frequency	3098-693-79	/58	U. S. Crystal Corporation
*CR81/U 17M00000 thru 65M00000	CR81/U + Frequency	3098-484-82	/58	Valpey-Fisher Corporation
*CR82/U 50M00000 thru 125M0000	CR82/U + Frequency	QA-180/D3, 28 Jan 1969	/59	Croven, Ltd.
*CR82/U 50M00000 thru 125M0000	CR82/U + Frequency	3098-520-68	/59	Electro Dynamics Crystal Corporation
*CR82/U 50M00000 thru 125M0000	CR82/U + Frequency	3098-1092-64	/59	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR82/U 50M00000 thru 125M0000	CR82/U + Frequency	3098-997-78	/59	U. S. Crystal Corporation
*CR82/U 50M00000 thru 125M0000	CR82/U + Frequency	3098-482-82	/59	Valpey-Fisher Corporation
*CR83/U 50M00000 thru 125M0000	CR83/U + Frequency	QA-180/D3, 28 Jan 1969	/60	Croven, Ltd.
*CR83/U 50M00000 thru 125M0000	CR83/U + Frequency	3098-520-68	/60	Electro Dynamics Crystal Corporation
*CR83/U 50M00000 thru 125M0000	CR83/U + Frequency	3098-1092-64	/60	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR83/U 50M00000 thru 125M0000	CR83/U + Frequency	3098-997-78	/60	U. S. Crystal Corporation
*CR83/U 50M00000 thru 125M0000	CR83/U + Frequency	3098-482-82	/60	Valpey-Fisher Corporation

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*CR84/U 24M00000 thru 61M00000	CR84/U + Frequency	QA-277/LD3, 4 Jan 1968	/61	Croven, Ltd.
*CR84/U 18M00000 thru 61M00000	CR84/U + Frequency	3098-814-67, 3098-154-84	/61	Electro Dynamics Crystal Corporation
*CR84/U 17M00000 thru 61M00000	CR84/U + Frequency	3098-484-82	/61	Valpey-Fisher Corporation
*CR85/U 920K0000 thru 20M00000	CR85/U + Frequency	3098-35-71	/56	Bliley Electric Company
*CR85/U 1M000000 thru 20M00000	CR85/U + Frequency	3098-1095-64	/56	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR85/U 800K0000 thru 20M00000	CR85/U + Frequency	3098-481-82	/56	Valpey-Fisher Corporation
*CR89/U 2M120000 thru 6M200000	CR89/U + Frequency	3098-35-71	/67 (EL)	Bliley Electric Company
*CR89/U 2M120000 thru 6M200000	CR89/U + Frequency	QA-118/ALD3, 11 Dec 1967	/67 (EL)	Croven, Ltd.
*CR89/U 2M120000 thru 6M200000	CR89/U + Frequency	3098-654-67	/67 (EL)	M-tron Industries, Inc.
*CR89/U 2M120000 thru 6M200000	CR89/U + Frequency	3098-607-74	/67 (EL)	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR89/U 2M120000 thru 6M200000	CR89/U + Frequency	3098-481-82	/67 (EL)	Valpey-Fisher Corporation
*CR96/U 3M600000 thru 9M250000	CR96/U + Frequency	3098-947-69	/71 (USAF)	Electro Dynamics Crystal Corporation
*CR97/U 8M000000 thru 10M00000	CR97/U + Frequency	QA-690/E2, 2 Dec 1971	/72	Croven, Ltd.
*CR97/U 8M000000 thru 10M00000	CR97/U + Frequency	3098-450-76	/72	Electro Dynamics Crystal Corporation
*CR97/U 8M000000 thru 10M00000	CR97/U + Frequency	3098-261-68	/72	M-tron Industries, Inc.
*CR97/U 8M000000 thru 10M00000	CR97/U + Frequency	3098-494-66	/72	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR97/U 8M000000 thru 10M00000	CR97/U + Frequency	3098-996-78	/72	U. S. Crystal Corporation
*CR97/U 8M000000 thru 10M00000	CR97/U + Frequency	3098-480-82	/72	Valpey-Fisher Corporation
*CR98/U 50M00000 thru 134M0000	CR98/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/73 (USAF)	Electro Dynamics Crystal Corporation

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI- CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
*CR98/U 50M00000 thru 134M0000	CR98/U + Frequency	3098-AF2-75, AF Ltr dtd 28 Nov 75	/73 (USAF)	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR101/U 7M000000 thru 20M00000	CR101/U + Frequency	3098-32-88	/103	Electro Dynamics Crystal Corporation
*CR101/U 7M000000 thru 20M00000	CR101/U + Frequency	3098-588-91	/103	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR102/U 50M00000 thru 125M0000	CR102/U + Frequency	3098-273-82 thru, 3098-275-82	/104	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR103/U 17M00000 thru 61M00000	CR103/U + Frequency	3098-865-82	/105	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR104/U 200K0000 thru 545K0000	CR104/U + Frequency	3098-AF1-74	/79 (USAF)	Bliley Electric Company
*CR105/U 48M00000 thru 125M0000	CR105/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/80	Electro Dynamics Crystal Corporation
*CR105/U 48M00000 thru 125M0000	CR105/U + Frequency	3098-AF2-75, AF Ltr dtd 28 Nov 75	/80	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR106/U 10M50000 thru 11M50000	CR106/U + Frequency	QA-690/E2, 2 Dec 1971	/82	Croven, Ltd.
*CR106/U 10M50000 thru 11M50000	CR106/U + Frequency	3098-450-76	/82	Electro Dynamics Crystal Corporation
*CR106/U 10M50000 thru 11M50000	CR106/U + Frequency	3098-261-68	/82	M-tron Industries, Inc.
*CR106/U 10M50000 thru 11M50000	CR106/U + Frequency	3098-494-66	/82	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR106/U 10M50000 thru 11M50000	CR106/U + Frequency	3098-480-82	/82	Valpey-Fisher Corporation
*CR107/U 50M00000 thru 125M0000	CR107/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/83	Electro Dynamics Crystal Corporation
*CR107/U 50M00000 thru 125M0000	CR107/U + Frequency	3098-AF2-75, AF Ltr dtd 28 Nov 75	/83	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR107/U 50M00000 thru 100M0000	CR107/U + Frequency	3098-AF-6-80	/83	U. S. Crystal Corporation
*CR108/U 50M00000 thru 93M00000	CR108/U + Frequency	3098-1670-64	/84 (USAF)	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR109/U 10M00000 thru 11M50000	CR109/U + Frequency	3098-579-79	/85 (USAF)	Electro Dynamics Crystal Corporation

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI- CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
*CR110/U 62M50000 thru 75M00000	CR110/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/86	Electro Dynamics Crystal Corporation
*CR110/U 62M50000 thru 75M00000	CR110/U + Frequency	3098-AF2-75, AF Ltr dtd 28 Nov 75	/86	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR111/U 17M00000 thru 62M00000	CR111/U + Frequency	3098-AF2-76, AF Ltr dtd 16 Mar 76	/87	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR112/U 5M000000 thru 20M00000	CR112/U + Frequency	3098-579-79	/88	Electro Dynamics Crystal Corporation
*CR112/U 5M000000 thru 20M00000	CR112/U + Frequency	3098-283-77	/88	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR112/U 5M000000 thru 20M00000	CR112/U + Frequency	3098-483-82	/88	Valpey-Fisher Corporation
*CR113/U 18M00000 thru 56M00000	CR113/U + Frequency	3098-20-69	/89	Electro Dynamics Crystal Corporation
*CR113/U 14M50000 thru 61M00000	CR113/U + Frequency	3098-AF1-78, AF Ltr dtd 30 Aug 78	/89	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR116/U 50M00000 thru 125M0000	CR116/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/92	Electro Dynamics Crystal Corporation
*CR116/U 50M00000 thru 125M0000	CR116/U + Frequency	3098-AF1-75, AF Ltr dtd 17 Jul 75	/92	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR116/U 50M00000 thru 125M0000	CR116/U + Frequency	3098-AF6-80, AF Ltr dtd 12 Jun 80	/92	U. S. Crystal Corporation
*CR116/U 50M00000 thru 125M0000	CR116/U + Frequency	3098-AF5-83, AF Ltr dtd 13 May 83	/92	Valpey-Fisher Corporation
*CR117/U 30M00000 thru 62M00000	CR117/U + Frequency	QA-277/LD3, 4 Jan 1968	/93 (USAF)	Croven, Ltd.
*CR117/U 30M00000 thru 61M00000	CR117/U + Frequency	3098-280-73	/93 (USAF)	M-tron Industries, Inc.
*CR117/U 30M00000 thru 62M00000	CR117/U + Frequency	3098-1091-64	/93 (USAF)	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR117/U 30M00000 thru 63M00000	CR117/U + Frequency	3098-484-82	/93 (USAF)	Valpey-Fisher Corporation
*CR119/U 920K0000 thru 20M00000	CR119/U + Frequency	3098-35-71	/95	Bliley Electric Company
*CR119/U 1M000000 thru 20M00000	CR119/U + Frequency	3098-1095-64	/95	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR119/U 800K0000 thru 20M00000	CR119/U + Frequency	3098-481-82	/95	Valpey-Fisher Corporation

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI- CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
*CR122/U 50M00000 thru 125M0000	CR122/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/99	Electro Dynamics Crystal Corporation
*CR122/U 50M00000 thru 125M0000	CR122/U + Frequency	3098-FL1-76, AF Ltr dtd 30 Jan 76	/99	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR123/U 50M00000 thru 125M0000	CR123/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/100	Electro Dynamics Crystal Corporation
*CR123/U 50M00000 thru 125M0000	CR123/U + Frequency	3098-AF1-76, AF Ltr dtd 30 Jan 76	/100	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR125/U 1M850000 thru 3M050000	CR125/U + Frequency	3098-35-71	/102 (USAF)	Bliley Electric Company
*CR125/U 1M850000 thru 3M050000	CR125/U + Frequency	3098-1095-64	/102 (USAF)	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR125/U 1M850000 thru 3M050000	CR125/U + Frequency	3098-481-82	/102 (USAF)	Valpey-Fisher Corporation
*CR127/U 10M00000 thru 61M00000	CR127/U + Frequency	3098-AF6-76, AF Ltr dtd 17 Dec 76	/106 (USAF)	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR128/U 17M00000 thru 61M00000	CR128/U + Frequency	3098-AF3-76, AF Ltr dtd 17 Mar 76	/108	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR129/U 9M000000 thru 12M00000	CR129/U + Frequency	3098-579-79	/110	Electro Dynamics Crystal Corporation
*CR129/U 9M000000 thru 12M00000	CR129/U + Frequency	3098-283-77	/110	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR129/U 9M000000 thru 12M00000	CR129/U + Frequency	3098-483-82	/110	Valpey-Fisher Corporation
*CR130/U 920K0000 thru 20M00000	CR130/U + Frequency	3098-35-71	/109	Bliley Electric Company
*CR130/U 1M000000 thru 20M00000	CR130/U + Frequency	3098-1095-64	/109	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR130/U 800K0000 thru 20M00000	CR130/U + Frequency	3098-481-82	/109	Valpey-Fisher Corporation
*CR131/U 920K0000 thru 20M00000	CR131/U + Frequency	3098-33-71	/120 (EL)	Bliley Electric Company
*CR131/U 1M000000 thru 20M00000	CR131/U + Frequency	3098-655-67	/120 (EL)	M-tron Industries, Inc.
*CR131/U 1M000000 thru 20M00000	CR131/U + Frequency	3098-1095-64	/120 (EL)	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR131/U 800K0000 thru 20M00000	CR131/U + Frequency	3098-481-82	/120 (EL)	Valpey-Fisher Corporation

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI- CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
*CR134/U 18M00000 thru 12M00000	CR134/U + Frequency	3098-579-79	/113	Electro Dynamics Crystal Corporation
*CR134/U 18M00000 thru 21M00000	CR134/U + Frequency	3098-283-77	/113	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR134/U 18M00000 thru 21M00000	CR134/U + Frequency	3098-483-82	/113	Valpey-Fisher Corporation
*CR135/U 10M00000 thru 12M00000	CR135/U + Frequency	3098-579-79	/114 (USAF)	Electro Dynamics Crystal Corporation
*CR136/U 8M000000 thru 10M00000	CR136/U + Frequency	3098-579-79	/115	Electro Dynamics Crystal Corporation
*CR136/U 8M000000 thru 10M00000	CR136/U + Frequency	3098-283-77	/115	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR136/U 8M000000 thru 10M00000	CR136/U + Frequency	3098-483-82	/115	Valpey-Fisher Corporation
*CR137/U 8M500000 thru 19M00000	CR137/U + Frequency	3098-579-79	/116	Electro Dynamics Crystal Corporation
*CR137/U 8M500000 thru 19M00000	CR137/U + Frequency	3098-283-77	/116	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR137/U 8M500000 thru 19M00000	CR137/U + Frequency	3098-483-82	/116	Valpey-Fisher Corporation
*CR139/U 20M00000 thru 22M00000	CR139/U + Frequency	QA-690/E2, 2 Dec 1971	/118	Croven, Ltd.
*CR139/U 20M00000 thru 22M00000	CR139/U + Frequency	3098-450-76	/118	Electro Dynamics Crystal Corporation
*CR139/U 20M00000 thru 22M00000	CR139/U + Frequency	3098-261-68	/118	M-tron Industries, Inc.
*CR139/U 20M00000 thru 22M00000	CR139/U + Frequency	3098-494-66	/118	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR139/U 20M00000 thru 22M00000	CR139/U + Frequency	3098-480-82	/118	Valpey-Fisher Corporation
*CR141/U 50M00000 thru 90M00000	CR141/U + Frequency	QA-180/D3, 28 Jan 1969	/122	Croven, Ltd.
*CR141/U 50M00000 thru 90M00000	CR141/U + Frequency	3098-520-68	/122	Electro Dynamics Crystal Corporation
*CR141/U 50M00000 thru 90M00000	CR141/U + Frequency	3098-1092-64	/122	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR141/U 48M00000 thru 90M00000	CR141/U + Frequency	3098-482-82	/122	Valpey-Fisher Corporation

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI- CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
*CR142/U 833K3330 thru 0	CR142/U + Frequency	3098-415-69, AF Ltr dtd 8 Mar 73	/123 (USAF)	M-tron Industries, Inc.
*CR148/U 10M00000 thru 61M00000	CR148/U + Frequency	3098-AF5-83, AF Ltr dtd 13 May 83	/129 (USAF)	Valpey-Fisher Corporation
*CR149/U 46M00000 thru 100M00000	CR149/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/130	Electro Dynamics Crystal Corporation
*CR149/U 46M00000 thru 100M00000	CR149/U + Frequency	3098-AF2-75, AF Ltr dtd 28 Nov 75	/130	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR150/U 45M00000 thru 100M00000	CR150/U + Frequency	3098-420-72	/131 (EL)	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR151/U 50M00000 thru 100M00000	CR151/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/132 (EL)	Electro Dynamics Crystal Corporation
*CR151/U 50M00000 thru 100M00000	CR151/U + Frequency	3098-AF2-75, AF Ltr dtd 28 Nov 75	/132 (EL)	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR152/U 16M00000 thru 61M00000	CR152/U + Frequency	3098-280-73	/133	M-tron Industries, Inc.
*CR152/U 16M00000 thru 61M00000	CR152/U + Frequency	3098-484-82	/133	Valpey-Fisher Corporation
*CR157/U 920K0000 thru 20M00000	CR157/U + Frequency	3098-35-71	/137	Bliley Electric Company
*CR157/U 1M000000 thru 20M00000	CR157/U + Frequency	QA-118/ALD3, 11 Dec 1967	/137	Croven, Ltd.
*CR157/U 1M000000 thru 20M00000	CR157/U + Frequency	3098-146-68	/137	Electro Dynamics Crystal Corporation
*CR157/U 1M000000 thru 20M00000	CR157/U + Frequency	3098-654-67	/137	M-tron Industries, Inc.
*CR157/U 1M800000 thru 20M00000	CR157/U + Frequency	3098-607-74	/137	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR157/U 1M000000 thru 20M00000	CR157/U + Frequency	3098-692-79	/137	U. S. Crystal Corporation
*CR159/U 800K0000 thru 20M00000	CR159/U + Frequency	3098-587-91	/140	OFC/McCoy Electronics Company (Mercersburg, PA)
*CR165/U 2M400000 thru 20M00000	CR165/U + Frequency	3098-1024-87	/146	OFC/McCoy Electronics Company (Mercersburg, PA)

Manufacturer and Supplier Location Information

Manufacturer: Bliley Electric Company (CAGE Code: 71034)

Location: 2545 West Grandview Boulevard, Erie, PA 16512, US

Plant Location: Same Address as Manufacturer

Manufacturer: Croven, Ltd. (CAGE Code: 00809)

Location: P.O. Box 420, 500 Beech Street, Whitby, Ontario, Canada

Plant Location: Same Address as Manufacturer

Manufacturer: Electro Dynamics Crystal Corporation (CAGE Code: 18853)

Location: 9075 Cody Street, Overland Park, KS 66214, US

Plant Location: Same Address as Manufacturer

Manufacturer: M-tron Industries, Inc. (CAGE Code: 23875)

Location: East Highway 50, Yankton, SD 57078, US

Plant Location: Same Address as Manufacturer

Manufacturer: OFC/McCoy Electronics Company (CAGE Code: 00136)

Location: Chestnut and Watts Street, Mount Holly Springs, PA 17065, US

Plant Location: OFC/McCoy Electronics Company (Mercersburg, PA), 80 Landis Dr., Mercersburg, PA, 17236, US

Manufacturer: U. S. Crystal Corporation (CAGE Code: 52847)

Location: 3605 McCart Street, Fort Worth, TX 76110, US

Plant Location: Same Address as Manufacturer

Manufacturer: Valpey-Fisher Corporation (CAGE Code: 21821)

Location: 75 South Street, Hopkinton, MA 01748, US

Plant Location: Same Address as Manufacturer