



QUALIFICATIONS VALIDATED
EVERY TWO YEARS

QPL-3098-88
02-Dec-04
SUPERSEDING
QPL-3098-87
06-Mar-03

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 43218-3990.

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 2MHz thru 10MHz	CR5/U + Frequency	3098-35-71	/77	Bliley Technologies, Inc.
*CR5/U 2MHz thru 10MHz	CR5/U + Frequency	3098-654-67	/77	M-tron Industries, Inc.
*CR5/U 2MHz thru 10MHz	CR5/U + Frequency	3098-481-82	/77	Valpey-Fisher Corp.
*CR5/U 2MHz thru 10MHz	CR5/U + Frequency	QA-118/ALD3, 11 Dec 1967	/77	Vectron International, Ltd.
*CR6/U 2MHz thru 10MHz	CR6/U + Frequency	3098-35-71	/78	Bliley Technologies, Inc.
*CR6/U 2MHz thru 10MHz	CR6/U + Frequency	3098-654-67	/78	M-tron Industries, Inc.
*CR6/U 2MHz thru 10MHz	CR6/U + Frequency	3098-481-82	/78	Valpey-Fisher Corp.
*CR6/U 2MHz thru 10MHz	CR6/U + Frequency	QA-118-ALD3, 11 Dec 1967	/78	Vectron International, Ltd.
*CR8/U 1MHz thru 10MHz	CR8/U + Frequency	3098-35-71	/111	Bliley Technologies, Inc.
*CR8/U 1MHz thru 10MHz	CR8/U + Frequency	3098-654-67	/111	M-tron Industries, Inc.
*CR8/U 1MHz thru 10MHz	CR8/U + Frequency	3098-481-82	/111	Valpey-Fisher Corp.
*CR8/U 1MHz thru 10MHz	CR8/U + Frequency	QA-118/ALD3, 11 Dec 1967	/111	Vectron International, Ltd.

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*CR18/U 920KHz thru 20MHz	CR18/U + Frequency	3098-35-71	/3	Bliley Technologies, Inc.
*CR18/U 1MHz thru 20MHz	CR18/U + Frequency	3098-411-03	/3	Electro Dynamics Crystal Corp.
*CR18/U 1MHz thru 20MHz	CR18/U + Frequency	3098-654-67	/3	M-tron Industries, Inc.
*CR18/U 800KHz thru 20MHz	CR18/U + Frequency	3098-481-82	/3	Valpey-Fisher Corp.
*CR18/U 1MHz thru 20MHz	CR18/U + Frequency	QA-118/ALD3, 11 Dec 1967	/3	Vectron International, Ltd.
*CR19/U 920KHz thru 20MHz	CR19/U + Frequency	3098-35-71	/4	Bliley Technologies, Inc.
*CR19/U 1MHz thru 20MHz	CR19/U + Frequency	3098-411-03	/4	Electro Dynamics Crystal Corp.
*CR19/U 1MHz thru 20MHz	CR19/U + Frequency	3098-654-67	/4	M-tron Industries, Inc.
*CR19/U 800KHz thru 20MHz	CR19/U + Frequency	3098-481-82	/4	Valpey-Fisher Corp.
*CR19/U 1MHz thru 20MHz	CR19/U + Frequency	QA-118/ALD3, 11 Dec 1967	/4	Vectron International, Ltd.
*CR25B/U 200KHz thru 555KHz	CR25B/U + Frequency	3098-34-71	/7	Bliley Technologies, Inc.
*CR26/U 200KHz thru 500KHz	CR26/U + Frequency	3098-32-71	/8	Bliley Technologies, Inc.
*CR27/U 920KHz thru 20MHz	CR27/U + Frequency	3098-33-71	/9	Bliley Technologies, Inc.
*CR27/U 1MHz thru 20MHz	CR27/U + Frequency	3098-411-03	/9	Electro Dynamics Crystal Corp.
*CR27/U 1MHz thru 20MHz	CR27/U + Frequency	3098-655-67	/9	M-tron Industries, Inc.
*CR27/U 800KHz thru 20MHz	CR27/U + Frequency	3098-481-82	/9	Valpey-Fisher Corp.
*CR28/U 920KHz thru 20MHz	CR28/U + Frequency	3098-33-71	/10	Bliley Technologies, Inc.
*CR28/U 1MHz thru 20MHz	CR28/U + Frequency	3098-411-03	/10	Electro Dynamics Crystal Corp.
*CR28/U 1MHz thru 20MHz	CR28/U + Frequency	3098-655-67	/10	M-tron Industries, Inc.

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*CR28/U 800KHz thru 20MHz	CR28/U + Frequency	3098-481-82	/10	Valpey-Fisher Corp.
*CR33/U 10MHz thru 30MHz	CR33/U + Frequency	3098-512-78	/14	Bliley Technologies, Inc.
*CR35/U 920KHz thru 20MHz	CR35/U + Frequency	3098-33-71	/15	Bliley Technologies, Inc.
*CR35/U 1MHz thru 20MHz	CR35/U + Frequency	3098-655-67	/15	M-tron Industries, Inc.
*CR35/U 800KHz thru 20MHz	CR35/U + Frequency	3098-481-82	/15	Valpey-Fisher Corp.
*CR36/U 920KHz thru 20MHz	CR36/U + Frequency	3098-33-71	/16	Bliley Technologies, Inc.
*CR36/U 1MHz thru 20MHz	CR36/U + Frequency	3098-655-67	/16	M-tron Industries, Inc.
*CR36/U 800KHz thru 20MHz	CR36/U + Frequency	3098-481-82	/16	Valpey-Fisher Corp.
*CR37/U 90KHz thru 250KHz	CR37/U + Frequency	3098-29-71	/17	Bliley Technologies, Inc.
*CR42/U 90KHz thru 250KHz	CR42/U + Frequency	3098-30-71	/21	Bliley Technologies, Inc.
*CR45/U 455KHz thru	CR45/U + Frequency	3098-31-71	/24	Bliley Technologies, Inc.
*CR46B/U 200KHz thru 550KHz	CR46B/U + Frequency	3098-34-71	/25	Bliley Technologies, Inc.
*CR47/U 190KHz thru 500KHz	CR47/U + Frequency	3098-32-71	/26	Bliley Technologies, Inc.
*CR52/U 10MHz thru 61MHz	CR52/U + Frequency	3098-833-67	/30	M-tron Industries, Inc.
*CR52/U 15MHz thru 61MHz	CR52/U + Frequency	QA-152/D3, 22 Apr 1968	/30	Vectron International, Ltd.
*CR54/U 50MHz thru 125MHz	CR54/U + Frequency	3098-479-82	/32	Valpey-Fisher Corp.
*CR55/U 18MHz thru 61MHz	CR55/U + Frequency	3098-815-67, 3098-154-84	/33	Electro Dynamics Crystal Corp.
*CR55/U 17MHz thru 61MHz	CR55/U + Frequency	3098-280-73	/33	M-tron Industries, Inc.

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*CR55/U 17MHz thru 62MHz	CR55/U + Frequency	3098-484-82	/33	Valpey-Fisher Corp.
*CR55/U 24MHz thru 62MHz	CR55/U + Frequency	QA-277/LD3, 4 Jan 1968	/33	Vectron International, Ltd.
*CR56/U 50MHz thru 125MHz	CR56/U + Frequency	3098-520-68	/34	Electro Dynamics Crystal Corp.
*CR56/U 50MHz thru 125MHz	CR56/U + Frequency	3098-482-82	/34	Valpey-Fisher Corp.
*CR56/U 50MHz thru 125MHz	CR56/U + Frequency	QA-180/D3, 28 Jan 1969	/34	Vectron International, Ltd.
*CR58/U 920KHz thru 20MHz	CR58/U + Frequency	3098-35-71	/36	Bliley Technologies, Inc.
*CR58/U 1MHz thru 20MHz	CR58/U + Frequency	3098-654-67	/36	M-tron Industries, Inc.
*CR58/U 800KHz thru 20MHz	CR58/U + Frequency	3098-481-82	/36	Valpey-Fisher Corp.
*CR58/U 1MHz thru 20MHz	CR58/U + Frequency	QA-118/ALD3, 11 Dec 1967	/36	Vectron International, Ltd.
*CR59/U 50MHz thru 125MHz	CR59/U + Frequency	3098-520A-68	/37	Electro Dynamics Crystal Corp.
*CR59/U 50MHz thru 125MHz	CR59/U + Frequency	3098-482-82	/37	Valpey-Fisher Corp.
*CR59/U 50MHz thru 125MHz	CR59/U + Frequency	QA-559/LS3, 8 Jul 1968	/37	Vectron International, Ltd.
*CR60/U 5MHz thru 20MHz	CR60/U + Frequency	3098-281-79	/38	Bliley Technologies, Inc.
*CR60/U 5MHz thru 20MHz	CR60/U + Frequency	3098-450-76	/38	Electro Dynamics Crystal Corp.
*CR60/U 5MHz thru 20MHz	CR60/U + Frequency	3098-261-68	/38	M-tron Industries, Inc.
*CR60/U 5MHz thru 20MHz	CR60/U + Frequency	3098-572-03	/38	Precision Devices, Inc. (PDI)
*CR60/U 5MHz thru 20MHz	CR60/U + Frequency	3098-480-82	/38	Valpey-Fisher Corp.
*CR60/U 5MHz thru 20MHz	CR60/U + Frequency	QA-690/E2, 2 Dec 1971	/38	Vectron International, Ltd.
*CR61/U 18MHz thru 61MHz	CR61/U + Frequency	3098-814-67, 3098-154-84	/39	Electro Dynamics Crystal Corp.

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*CR61/U 17MHz thru 61MHz	CR61/U + Frequency	3098-484-82	/39	Valpey-Fisher Corp.
*CR61/U 24MHz thru 61MHz	CR61/U + Frequency	QA-277/LD3, 4 Jan 1968	/39	Vectron International, Ltd.
*CR62/U 920KHz thru 20MHz	CR62/U + Frequency	3098-33-71	/40	Bliley Technologies, Inc.
*CR62/U 1MHz thru 20MHz	CR62/U + Frequency	3098-655-67	/40	M-tron Industries, Inc.
*CR62/U 800KHz thru 20MHz	CR62/U + Frequency	3098-481-82	/40	Valpey-Fisher Corp.
*CR63B/U 200KHz thru 555KHz	CR63B/U + Frequency	3098-34-71	/41	Bliley Technologies, Inc.
*CR64/U 2.4MHz thru 20MHz	CR64/U + Frequency	3098-450-76	/42	Electro Dynamics Crystal Corp.
*CR64/U 2.4MHz thru 20MHz	CR64/U + Frequency	3098-261-68	/42	M-tron Industries, Inc.
*CR64/U 2.4MHz thru 20MHz	CR64/U + Frequency	3098-572-03	/42	Precision Devices, Inc. (PDI)
*CR64/U 2.9MHz thru 20MHz	CR64/U + Frequency	3098-480-82	/42	Valpey-Fisher Corp.
*CR64/U 3.7MHz thru 20MHz	CR64/U + Frequency	QA-690/E2, 2 Dec 1971	/42	Vectron International, Ltd.
*CR65/U 10MHz thru 61MHz	CR65/U + Frequency	3098-833-67	/43	M-tron Industries, Inc.
*CR65/U 15MHz thru 61MHz	CR65/U + Frequency	QA-165/L3, 5 Jan 1970,	/43	Vectron International, Ltd.
*CR67/U 18MHz thru 62MHz	CR67/U + Frequency	3098-815-67, 3098-154-84	/45	Electro Dynamics Crystal Corp.
*CR67/U 17MHz thru 61MHz	CR67/U + Frequency	3098-280-73	/45	M-tron Industries, Inc.
*CR67/U 17MHz thru 62MHz	CR67/U + Frequency	3098-484-82	/45	Valpey-Fisher Corp.
*CR67/U 24MHz thru 62MHz	CR67/U + Frequency	QA-277/LD3, 4 Jan 1968	/45	Vectron International, Ltd.
*CR69/U 2.9MHz thru 25MHz	CR69/U + Frequency	3098-450-76	/47	Electro Dynamics Crystal Corp.
*CR69/U 2.9MHz thru 25MHz	CR69/U + Frequency	3098-572-03	/47	Precision Devices, Inc. (PDI)

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*CR69/U 2.9MHz thru 25MHz	CR69/U + Frequency	3098-480-82	/47	Valpey-Fisher Corp.
*CR69/U 2.9MHz thru 25MHz	CR69/U + Frequency	QA-690/E2, 2 Dec 1971	/47	Vectron International, Ltd.
*CR72/U 18MHz thru 61MHz	CR72/U + Frequency	3098-815-67, 3098-154-84	/50	Electro Dynamics Crystal Corp.
*CR72/U 17MHz thru 61MHz	CR72/U + Frequency	3098-280-73	/50	M-tron Industries, Inc.
*CR72/U 17MHz thru 61MHz	CR72/U + Frequency	3098-484-82	/50	Valpey-Fisher Corp.
*CR72/U 24MHz thru 61MHz	CR72/U + Frequency	QA-277/LD3, 4 Jan 1968	/50	Vectron International, Ltd.
*CR75/U 50MHz thru 125MHz	CR75/U + Frequency	3098-479-92	/52	Valpey-Fisher Corp.
*CR76/U 18MHz thru 61MHz	CR76/U + Frequency	3098-154-84	/53	Electro Dynamics Crystal Corp.
*CR76/U 16MHz thru 61MHz	CR76/U + Frequency	3098-280-73	/53	M-tron Industries, Inc.
*CR76/U 16MHz thru 61MHz	CR76/U + Frequency	3098-484-82	/53	Valpey-Fisher Corp.
*CR76/U 24MHz thru 61MHz	CR76/U + Frequency	QA-277/LD3, 4 Jan 1968	/53	Vectron International, Ltd.
*CR77/U 18MHz thru 62MHz	CR77/U + Frequency	3098-815-67, 3098-154-84	/55	Electro Dynamics Crystal Corp.
*CR77/U 17MHz thru 61MHz	CR77/U + Frequency	3098-280-73	/55	M-tron Industries, Inc.
*CR77/U 17MHz thru 62MHz	CR77/U + Frequency	3098-484-82	/55	Valpey-Fisher Corp.
*CR77/U 24MHz thru 62MHz	CR77/U + Frequency	QA-277/LD3, 4 Jan 1968	/55	Vectron International, Ltd.
*CR78/U 2.2MHz thru 20MHz	CR78/U + Frequency	3098-450-76	/62	Electro Dynamics Crystal Corp.
*CR78/U 2.2MHz thru 20MHz	CR78/U + Frequency	3098-261-68	/62	M-tron Industries, Inc.
*CR78/U 2.2MHz thru 20MHz	CR78/U + Frequency	3098-572-03	/62	Precision Devices, Inc. (PDI)
*CR78/U 2.2MHz thru 20MHz	CR78/U + Frequency	3098-480-82	/62	Valpey-Fisher Corp.

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*CR78/U 2.9MHz thru 20MHz	CR78/U + Frequency	QA-690/E2, 2 Dec 1971	/62	Vectron International, Ltd.
*CR79/U 2.9MHz thru 20MHz	CR79/U + Frequency	3098-450-76	/63	Electro Dynamics Crystal Corp.
*CR79/U 2.9MHz thru 20MHz	CR79/U + Frequency	3098-261-68	/63	M-tron Industries, Inc.
*CR79/U 2.9MHz thru 20MHz	CR79/U + Frequency	3098-572-03	/63	Precision Devices, Inc. (PDI)
*CR79/U 2.9MHz thru 20MHz	CR79/U + Frequency	3098-480-82	/63	Valpey-Fisher Corp.
*CR79/U 2.9MHz thru 20MHz	CR79/U + Frequency	QA-690/E2, 2 Dec 1971	/63	Vectron International, Ltd.
*CR80/U 50MHz thru 125MHz	CR80/U + Frequency	3098-520-68	/57	Electro Dynamics Crystal Corp.
*CR80/U 50MHz thru 125MHz	CR80/U + Frequency	3098-482-82	/57	Valpey-Fisher Corp.
*CR80/U 50MHz thru 125MHz	CR80/U + Frequency	QA-180/D3, 28 Jan 1969	/57	Vectron International, Ltd.
*CR81/U 18MHz thru 61MHz	CR81/U + Frequency	3098-815-67, 3098-154-84	/58	Electro Dynamics Crystal Corp.
*CR81/U 17MHz thru 61MHz	CR81/U + Frequency	3098-280-73	/58	M-tron Industries, Inc.
*CR81/U 17MHz thru 65MHz	CR81/U + Frequency	3098-484-82	/58	Valpey-Fisher Corp.
*CR81/U 24MHz thru 62MHz	CR81/U + Frequency	QA-277/LD3, 4 Jan 1968	/58	Vectron International, Ltd.
*CR82/U 50MHz thru 125MHz	CR82/U + Frequency	3098-520-68	/59	Electro Dynamics Crystal Corp.
*CR82/U 50MHz thru 125MHz	CR82/U + Frequency	3098-482-82	/59	Valpey-Fisher Corp.
*CR82/U 50MHz thru 125MHz	CR82/U + Frequency	QA-180/D3, 28 Jan 1969	/59	Vectron International, Ltd.
*CR83/U 50MHz thru 125MHz	CR83/U + Frequency	3098-520-68	/60	Electro Dynamics Crystal Corp.
*CR83/U 50MHz thru 125MHz	CR83/U + Frequency	3098-482-82	/60	Valpey-Fisher Corp.
*CR83/U 50MHz thru 125MHz	CR83/U + Frequency	QA-180/D3, 28 Jan 1969	/60	Vectron International, Ltd.

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*CR84/U 18MHz thru 61MHz	CR84/U + Frequency	3098-814-67, 3098-154-84	/61	Electro Dynamics Crystal Corp.
*CR84/U 17MHz thru 61MHz	CR84/U + Frequency	3098-484-82	/61	Valpey-Fisher Corp.
*CR84/U 24MHz thru 61MHz	CR84/U + Frequency	QA-277/LD3, 4 Jan 1968	/61	Vectron International, Ltd.
*CR85/U 920KHz thru 20MHz	CR85/U + Frequency	3098-35-71	/56	Bliley Technologies, Inc.
*CR85/U 800KHz thru 20MHz	CR85/U + Frequency	3098-481-82	/56	Valpey-Fisher Corp.
*CR89/U 2.12MHz thru 6.2MHz	CR89/U + Frequency	3098-35-71	/67	Bliley Technologies, Inc.
*CR89/U 2.12MHz thru 6.2MHz	CR89/U + Frequency	3098-654-67	/67	M-tron Industries, Inc.
*CR89/U 2.12MHz thru 6.2MHz	CR89/U + Frequency	3098-481-82	/67	Valpey-Fisher Corp.
*CR89/U 2.12MHz thru 6.2MHz	CR89/U + Frequency	QA-118/ALD3, 11 Dec 1967	/67	Vectron International, Ltd.
*CR96/U 3.6MHz thru 9.25MHz	CR96/U + Frequency	3098-947-69	/71	Electro Dynamics Crystal Corp.
*CR97/U 8MHz thru 10MHz	CR97/U + Frequency	3098-450-76	/72	Electro Dynamics Crystal Corp.
*CR97/U 8MHz thru 10MHz	CR97/U + Frequency	3098-261-68	/72	M-tron Industries, Inc.
*CR97/U 8MHz thru 10MHz	CR97/U + Frequency	3098-572-03	/72	Precision Devices, Inc. (PDI)
*CR97/U 8MHz thru 10MHz	CR97/U + Frequency	3098-480-82	/72	Valpey-Fisher Corp.
*CR97/U 8MHz thru 10MHz	CR97/U + Frequency	QA-690/E2, 2 Dec 1971	/72	Vectron International, Ltd.
*CR98/U 50MHz thru 134MHz	CR98/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/73	Electro Dynamics Crystal Corp.
*CR101/U 7MHz thru 20MHz	CR101/U + Frequency	3098-32-88	/103	Electro Dynamics Crystal Corp.
*CR101/U 7MHz thru 20MHz	CR101/U + Frequency	3098-587-03	/103	Vectron International, Ltd.

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*CR102/U 50MHz thru 125MHz	CR102/U + Frequency	3098-587-03	/104	Vectron International, Ltd.
*CR103/U 17MHz thru 61MHz	CR103/U + Frequency	3098-587-03	/105	Vectron International, Ltd.
*CR104/U 200KHz thru 545KHz	CR104/U + Frequency	3098-AF1-74	/79	Bliley Technologies, Inc.
*CR105/U 48MHz thru 125MHz	CR105/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/80	Electro Dynamics Crystal Corp.
*CR106/U 10.5MHz thru 11.5MHz	CR106/U + Frequency	3098-450-76	/82	Electro Dynamics Crystal Corp.
*CR106/U 10.5MHz thru 11.5MHz	CR106/U + Frequency	3098-261-68	/82	M-tron Industries, Inc.
*CR106/U 10.5MHz thru 11.5MHz	CR106/U + Frequency	3098-572-03	/82	Precision Devices, Inc. (PDI)
*CR106/U 10.5MHz thru 11.5MHz	CR106/U + Frequency	3098-480-82	/82	Valpey-Fisher Corp.
*CR106/U 10.5MHz thru 11.5MHz	CR106/U + Frequency	QA-690/E2, 2 Dec 1971	/82	Vectron International, Ltd.
*CR107/U 50MHz thru 125MHz	CR107/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/83	Electro Dynamics Crystal Corp.
*CR109/U 10MHz thru 11.5MHz	CR109/U + Frequency	3098-579-79	/85	Electro Dynamics Crystal Corp.
*CR110/U 62.5MHz thru 75MHz	CR110/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/86	Electro Dynamics Crystal Corp.
*CR112/U 5MHz thru 20MHz	CR112/U + Frequency	3098-579-79	/88	Electro Dynamics Crystal Corp.
*CR112/U 5MHz thru 20MHz	CR112/U + Frequency	3098-483-82	/88	Valpey-Fisher Corp.
*CR113/U 18MHz thru 56MHz	CR113/U + Frequency	3098-20-69	/89	Electro Dynamics Crystal Corp.
*CR116/U 50MHz thru 125MHz	CR116/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/92	Electro Dynamics Crystal Corp.
*CR116/U 50MHz thru 125MHz	CR116/U + Frequency	3098-AF5-83, AF Ltr dtd 13 May 83	/92	Valpey-Fisher Corp.

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*CR117/U 30MHz thru 61MHz	CR117/U + Frequency	3098-280-73	/93	M-tron Industries, Inc.
*CR117/U 30MHz thru 63MHz	CR117/U + Frequency	3098-484-82	/93	Valpey-Fisher Corp.
*CR117/U 30MHz thru 62MHz	CR117/U + Frequency	QA-277/LD3, 4 Jan 1968	/93	Vectron International, Ltd.
*CR119/U 920KHz thru 20MHz	CR119/U + Frequency	3098-35-71	/95	Bliley Technologies, Inc.
*CR119/U 800KHz thru 20MHz	CR119/U + Frequency	3098-481-82	/95	Valpey-Fisher Corp.
*CR122/U 50MHz thru 125MHz	CR122/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/99	Electro Dynamics Crystal Corp.
*CR123/U 50MHz thru 125MHz	CR123/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/100	Electro Dynamics Crystal Corp.
*CR125/U 1.85MHz thru 3.05MHz	CR125/U + Frequency	3098-35-71	/102	Bliley Technologies, Inc.
*CR125/U 1.85MHz thru 3.05MHz	CR125/U + Frequency	3098-481-82	/102	Valpey-Fisher Corp.
*CR129/U 9MHz thru 12MHz	CR129/U + Frequency	3098-579-79	/110	Electro Dynamics Crystal Corp.
*CR129/U 9MHz thru 12MHz	CR129/U + Frequency	3098-483-82	/110	Valpey-Fisher Corp.
*CR130/U 920KHz thru 20MHz	CR130/U + Frequency	3098-35-71	/109	Bliley Technologies, Inc.
*CR130/U 800KHz thru 20MHz	CR130/U + Frequency	3098-481-82	/109	Valpey-Fisher Corp.
*CR131/U 920KHz thru 20MHz	CR131/U + Frequency	3098-33-71	/120	Bliley Technologies, Inc.
*CR131/U 1MHz thru 20MHz	CR131/U + Frequency	3098-655-67	/120	M-tron Industries, Inc.
*CR131/U 800KHz thru 20MHz	CR131/U + Frequency	3098-481-82	/120	Valpey-Fisher Corp.
*CR134/U 18MHz thru 21MHz	CR134/U + Frequency	3098-579-79	/113	Electro Dynamics Crystal Corp.
*CR134/U 18MHz thru 21MHz	CR134/U + Frequency	3098-483-82	/113	Valpey-Fisher Corp.

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*CR135/U 10MHz thru 12MHz	CR135/U + Frequency	3098-579-79	/114	Electro Dynamics Crystal Corp.
*CR136/U 8MHz thru 10MHz	CR136/U + Frequency	3098-579-79	/115	Electro Dynamics Crystal Corp.
*CR136/U 8MHz thru 10MHz	CR136/U + Frequency	3098-483-82	/115	Valpey-Fisher Corp.
*CR137/U 8.5MHz thru 19MHz	CR137/U + Frequency	3098-579-79	/116	Electro Dynamics Crystal Corp.
*CR137/U 8.5MHz thru 19MHz	CR137/U + Frequency	3098-483-82	/116	Valpey-Fisher Corp.
*CR139/U 20MHz thru 22MHz	CR139/U + Frequency	3098-450-76	/118	Electro Dynamics Crystal Corp.
*CR139/U 20MHz thru 22MHz	CR139/U + Frequency	3098-261-68	/118	M-tron Industries, Inc.
*CR139/U 20MHz thru 22MHz	CR139/U + Frequency	3098-572-03	/118	Precision Devices, Inc. (PDI)
*CR139/U 20MHz thru 22MHz	CR139/U + Frequency	3098-480-82	/118	Valpey-Fisher Corp.
*CR139/U 20MHz thru 22MHz	CR139/U + Frequency	QA-690/E2, 2 Dec 1971, 3098-572-03	/118	Vectron International, Ltd.
*CR141/U 50MHz thru 90MHz	CR141/U + Frequency	3098-520-68	/122	Electro Dynamics Crystal Corp.
*CR141/U 48MHz thru 90MHz	CR141/U + Frequency	3098-482-82	/122	Valpey-Fisher Corp.
*CR141/U 50MHz thru 90MHz	CR141/U + Frequency	QA-180/D3, 28 Jan 1969	/122	Vectron International, Ltd.
*CR142/U 833KHz thru	CR142/U + Frequency	3098-415-69, AF Ltr dtd 8 Mar 73	/123	M-tron Industries, Inc.
*CR148/U 10MHz thru 61MHz	CR148/U + Frequency	3098-AF5-83, AF Ltr dtd 13 May 83	/129	Valpey-Fisher Corp.
*CR149/U 46MHz thru 100MHz	CR149/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/130	Electro Dynamics Crystal Corp.
*CR151/U 50MHz thru 100MHz	CR151/U + Frequency	3098-AF5-81, AF Ltr dtd 14 May 81	/132	Electro Dynamics Crystal Corp.
*CR152/U 16MHz thru 61MHz	CR152/U + Frequency	3098-280-73	/133	M-tron Industries, Inc.

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI- CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
*CR152/U 16MHz thru 61MHz	CR152/U + Frequency	3098-484-82	/133	Valpey-Fisher Corp.
*CR157/U 920KHz thru 20MHz	CR157/U + Frequency	3098-35-71	/137	Bliley Technologies, Inc.
*CR157/U 1MHz thru 20MHz	CR157/U + Frequency	3098-146-68	/137	Electro Dynamics Crystal Corp.
*CR157/U 1MHz thru 20MHz	CR157/U + Frequency	3098-654-67	/137	M-tron Industries, Inc.
*CR157/U 1MHz thru 20MHz	CR157/U + Frequency	QA-118/ALD3, 11 Dec 1967	/137	Vectron International, Ltd.

Manufacturer and Supplier Location Information

Manufacturer: Bliley Technologies, Inc. (CAGE Code: 71034)

Location: 2545 West Grandview Boulevard, Erie, PA 16508-0428, US

Plant Location: Same Address as Manufacturer

Manufacturer: Electro Dynamics Crystal Corp. (CAGE Code: 18853)

Location: 9075 Cody Street, Overland Park, KS 66214-1730, US

Plant Location: Same Address as Manufacturer

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

Location: P.O. Box 630, 100 Douglas Avenue, Yankton, SD 57078-0630, US

Plant Location: Same Address as Manufacturer

Manufacturer: Precision Devices, Inc. (PDI) (CAGE Code: 0S4G1)

Location: P.O. Box 620155, 8840 North Greenview Drive, Middleton, WI 53562-0155, US

Plant Location: Same Address as Manufacturer

Manufacturer: Valpey-Fisher Corp. (CAGE Code: 21821)

Location: 75 South Street, Hopkinton, MA 01748-2284, US

Plant Location: Same Address as Manufacturer

Manufacturer: Vectron International, Ltd. (CAGE Code: 00809)

Location: P.O. Box 420, 500 Beech Street, Whitby, Ontario L1N 5S5, Canada

Plant Location: Same Address as Manufacturer