



Space Qualified, LVDS, HC/ACMOS, TTL, HC/ACMOS/LVTTL, LVCMOS, Crystal Oscillators

Xsis Electronics is a leading supplier of Advance Design Rad-Hard Crystal Oscillators for Space Applications. Some of the Space Programs where Xsis Oscillators have been used in flight hardware and our standard Space Qualified Oscillator Specifications (SCDs) are shown below. All the Model Numbers offered below use 4 point Crystal mount to provide the highest level of shock and vibration performance. For TID, SEL and SEU data or any other special requirements, please contact us. **Screening & QCI are available per MIL-PRF-55310, MIL-PRF-38534 or EEE-INST-002 as required.**

Program Name	Description
Spacebuss 3000B	Alcatel Telecommunication Satellite Program
Amos 3	Israel Telecommunication Satellite
Cryosat	ESA Earth Observation Satellite
HTV	Japanese Space Vehicle to Space Station
TerrarSar-X	German Earth Observation Satellite
Rapid Eye	ESA Earth Observation Satellite
Lisa Pathfinder	ESA/NASA Earth Observation Satellite
ISSR Mass Memory	Japanese Project
Express AM33, AM44	Russian Telecommunication Satellite

SPACE QUALIFIED CRYSTAL OSCILLATORS Click "Model Number" to open a Detail (pdf Version) Specification Sheet

Flight Model	Alternate Models	Supply Voltage	Output Type	Output Enable	Frequency Range	Package Outline
<u>XD8S</u>	XD8E, XD8B, XD8P	2.5V & 3.3V	LVDS	Yes	100 MHz - 200 MHz	5 x 7 mm
<u>XD81S</u>	XD81E, XD81B, XD81P	2.5V & 3.3V	LVDS	Yes	100 MHz - 200 MHz	5 x 7 mm
<u>XD82S</u>	XD82E, XD82B, XD82P	2.5V & 3.3V	LVDS	Yes	100 MHz - 200 MHz	5 x 7 mm "Gull Wing Leads
<u>XD83S</u>	XD83E, XD83B, XD83P	2.5V & 3.3V	LVDS	Yes	100 MHz - 200 MHz	5 x 7 mm
<u>XE7S-A0</u>	XE7E-Ax, XE7B-Ax, XE7P-Ax	5.0 V	HC/ACMOS	Yes	500 KHz - 90.0 MHz	5 x 7 mm
<u>XE7S-L0</u>	XE7E-Lx, XE7B-Lx, XE7P-Lx	3.3 V	HC/ACMOS	Yes	500 KHz - 125.0 MHz	
<u>XE7S-N0</u>	XE7E-Nx, XE7B-Nx, XE7P-Nx	2.5 V	HC/ACMOS	Yes	500 KHz - 120.0 MHz	Lead Less

<u>XE71S-Ax</u>	XE71E-Ax, XE71B-Ax, XE71P-Ax	5.0 V	HC/ACMOS	Yes	500 KHz - 90.0 MHz	5 x 7 mm
XE71S-Lx	XE71E-Lx, XE71B-Lx, XE71P-Lx	3.3 V	HC/ACMOS	Yes	500 KHz - 125.0 MHz	
XE71S-Nx	XE71E-Nx, XE71B-Nx, XE71P-Nx	2.5 V	HC/ACMOS	Yes	500 KHz - 120.0 MHz	"Formed" Leads
XE72S-Ax	XE72E-Ax, XE72B-Ax, XE72P-Ax	5.0 V	HC/ACMOS	Yes	500 KHz - 90.0 MHz	5 x 7 mm
XE72S-Lx	XE72E-Lx, XE72B-Lx, XE72P-Lx	3.3 V	HC/ACMOS	Yes	500 KHz - 125.0 MHz	- All
XE72S-Nx	XE72E-Nx, XE72B-Nx, XE72P-Nx	2.5 V	HC/ACMOS	Yes	500 KHz - 120.0 MHz	"Gull-wing" Leads
XE73S-Ax	XE73E-Ax, XE73B-Ax, XE73P-Ax	5.0 V	HC/ACMOS	Yes	500 KHz - 90.0 MHz	5 x 7 mm
XE73S-Lx	XE73E-Lx, XE73B-Lx, XE73P-Lx	3.3 V	HC/ACMOS	Yes	500 KHz - 125.0 MHz	
XE73S-Nx	XE73E-Nx, XE73B-Nx, XE73P-Nx	2.5 V	HC/ACMOS	Yes	500 KHz - 120.0 MHz	"Straight" Leads
<u>XE64S-A00</u>	XE64E-A00, XE64B-A00, XE64P-A00	5.0 V	HC/ACMOS	Yes	450 K Hz - 90.0 MHz	
XE64S-L00	XE64E-L00, XE64B-L00, XE64P-L00	3.3 V	HC/ACMOS /LVTTL	Yes	450 K Hz - 125.0 MHz	7 x 9 mm
<u>XE64S-N00</u>	XE64E-N00, XE64B-N00, XE64P-N00	2.5 V	HC/ACMOS	Yes	450 K Hz -120.0 MHz	"J" Leads
XE641S-A00	XE641E-A00, XE641B-A00, XE641P-A00	5.0 V	HC/ACMOS	Yes	450 KHz - 90.0 MHz	
XE641S-L00	XE641E-L00, XE641B-L00, XE641P-L00	3.3 V	HC/ACMOS/ LVTTL	Yes	450 KHz - 125.0 MHz	7 x 9 mm
<u>XE641S-N00</u>	XE641E-N00, XE641B-N00, XE641P-N00	2.5 V	HC/ACMOS	Yes	450 KHz - 120.0 MHz	"Formed" Leads
<u>XE642S-A00</u>	XE642E-A00, XE642B-A00, XE642P- A00	5.0 V	HC/ACMOS	Yes	450 KHz - 90.0 MHz	7 x 9 mm
XE642S-L00	XE642E-L00, XE642B-L00, XE642P- L00	3.3 V	HC/ACMOS /LVTTL	Yes	450 KHz - 125.0 MHz	
XE642S-N00	XE642E-N00, XE642B-N00, XE642P- N00	2.5 V	HC/ACMOS	Yes	450 KHz -120.0 MHz	"Gull Wing" Leads
XE643S-A00	XE643E-A00, XE643B-A00, XE643P- A00	5.0 V	HC/ACMOS	Yes	450 KHz - 90.0 MHz	7 x 9 mm
XE643S-L00	XE643E-L00, XE643B-L00, XE643P- L00	3.3 V	HC/ACMOS /LVTTL	Yes	450 KHz - 125.0 MHz	
XE643S-N00	XE643E-N00, XE643B-N00, XE643P- N00	2.5 V	HC/ACMOS	Yes	450 KHz - 120.0 MHz	"Straight" Leads
<u>XE63S-A00</u>	XE63E-A00 XE63B-A00, XE63P-A00	5.0 V	HC/ACMOS	Yes	400 KHz - 90.0 MHz	
XE63S-B00	XE63E-B00 XE63B-B00, XE63P-B00	5.0 V	TTL	Yes	400 KHz - 90.0 MHz	9 x 14 mm
<u>XE63S-L00</u>	XE63E-L00 XE63B-L00, XE63P-L00	3.3 V	HC/ACMOS /LVTTL	Yes	400 K Hz - 100.0 MHz	"J" Leads
<u>XE63S-N00</u>	XE63E-N00 XE63B-N00, XE63P-N00	2.5 V	HC/ACMOS	Yes	400 K Hz - 70.0 MHz	

XE60S-A00	XE60E-A00 XE60B-A00, XE60P-A00	5.0 V	HC/ACMOS	Yes	125 Hz - 90.0 MHz	14 Pin
<u>XE60S-B00</u>	XE60E-B00 XE60B-B00, XE60P-B00	5.0 V	TTL	Yes	125 Hz - 90.0 MHz	the sum and
XE60S-L00	XE60E-L00 XE60B-L00, XE60P-L00	3.3 V	HC/ACMOS /LVTTL	Yes	125 Hz - 125.0 MHz	
XE60S-N00	XE60E-N00 XE60B-N00, XE60P-N00	2.5 V	HC/ACMOS	Yes	125 Hz - 120.0 MHz	DIP
XE61S-A00	XE61E-A00 XE61B-A00, XE61P-A00	5.0 V	HC/ACMOS	Yes	125 Hz - 90.0 MHz	4 Pin
<u>XE61S-B00</u>	XE61E-B00 XE61B-B00, XE61P-B00	5.0 V	TTL	Yes	125 Hz - 90.0 MHz	the standard
XE61S-L00	XE61E-L00 XE61B-L00, XE61P-L00	3.3 V	HC/ACMOS /LVTTL	Yes	125 Hz - 125.0 MHz	
<u>XE61S-N00</u>	XE61E-N00 XE61B-N00, XE61P-N00	2.5 V	HC/ACMOS	Yes	125 Hz -120.0 MHz	DIP
<u>XE66S-A00</u>	XE66E-A00 XE66B-A00, XE66P-A00	5.0 V	HC/ACMOS	Yes	450 KHz - 90.0 MHz	
<u>XE66S-B00</u>	XE66E-B00 XE66B-B00, XE66P-B00	5.0 V	TTL	Yes	450 KHz - 90.0 MHz	TO-5
XE66S-L00	XE66E-L00 XE66B-L00, XE66P-L00	3.3 V	HC/ACMOS /LVTTL	Yes	450 KHz - 100.0 MHz	8 Pin (Round)
<u>XE66S-N00</u>	XE66E-N00 XE66B-N00, XE66P-N00	2.5 V	HC/ACMOS	Yes	450 KHz - 70.0 MHz	()

Updated July 05, 2022



High Reliability Hybrid Microcircuit Crystal Oscillators & Crystal Units



Extreme High Temperature Crystal Oscillators

Xsis Electronics offers high reliability crystal oscillators for extremely high temperature applications. These oscillators are designed and processed by Xsis Electronics to operate over an extended temperature range of -55°C to 230°C. High temperature materials and proven processes are utilized to provide high reliability and long life at extreme temperatures.

High Temperature Crystal Oscillators manufactured by Xsis Electronics are designed for High Temperature and extreme environment applications such as, Down Hole Drilling Measurements, Jet Engine Sensors, High Temperature Avionics, High Temperature coupled with High Shock & Vibrations, etc.

Exceptionally good frequency aging characteristics are achieved by the use of precision quartz crystals manufactured using inhouse proprietary processes developed and improved over 41+ years of experience in manufacturing crystal oscillators for Military (QPL) and space applications. All oscillators are tested 100% over the operating temperature range.

HIGH TEMPERATURE CRYSTAL OSCILLATORS Click "Type Number" to open a Detai (pdf Version) Specification Sheet

Type Number	Supply Voltage	Output Type	Output Enable	Frequency Range	Package Outline
<u>XH6A</u>	5.0 VDC	HCMOS/TTL	YES	500 KHz - 40 MHz	5 x 7 mm
<u>XH6L</u>	3.3 VDC	HCMOS/LVTTL	YES	500 KHz - 40 MHz	<u> </u>
<u>XH6N</u>	2.5 VDC	HCMOS	YES	500 KHz - 40 MHz	
<u>XH6R</u>	1.8 VDC	HCMOS	YES	500 KHz - 40 MHz	Lead Less
<u>XH40A</u>	5.0 VDC	HCMOS/TTL	YES	500 KHz - 40 MHz	7 x 9 mm
<u>XH40L</u>	3.3 VDC	HCMOS/LVTTL	YES	500 KHz - 40 MHz	
<u>XH40N</u>	2.5 VDC	HCMOS	YES	500 KHz - 40 MHz	
<u>XH40R</u>	1.8 VDC	HCMOS	YES	500 KHz - 40 MHz	"J" Leads
<u>XH41A</u>	5.0 VDC	HCMOS/TTL	YES	500 KHz - 40 MHz	7 x 9 mm
<u>XH41L</u>	3.3 VDC	HCMOS/LVTTL	YES	500 KHz - 40 MHz	
<u>XH41N</u>	2.5 VDC	HCMOS	YES	500 KHz - 40 MHz	
<u>XH41R</u>	1.8 VDC	HCMOS	YES	500 KHz - 40 MHz	"Formed" Leads
<u>XH42A</u>	5.0 VDC	HCMOS/TTL	YES	500 KHz - 40 MHz	7 x 9 mm
<u>XH42L</u>	3.3 VDC	HCMOS/LVTTL	YES	500 KHz - 40 MHz	Inter Aller
<u>XH42N</u>	2.5 VDC	HCMOS	YES	500 KHz - 40 MHz	
<u>XH42R</u>	1.8 VDC	HCMOS	YES	500 KHz - 40 MHz	"Gull Wing" Leads
<u>XH43A</u>	5.0 VDC	HCMOS/TTL	YES	500 KHz - 40 MHz	7 x 9 mm
<u>XH43L</u>	3.3 VDC	HCMOS/LVTTL	YES	500 KHz - 40 MHz	Aller
<u>XH43N</u>	2.5 VDC	HCMOS	YES	500 KHz - 40 MHz	
<u>XH43R</u>	1.8 VDC	HCMOS	YES	500 KHz - 40 MHz	"Straight" Leads
<u>XH30A</u>	5.0 VDC	HCMOS/TTL	YES	500 KHz - 40 MHz	9 x 14 mm
<u>XH30L</u>	3.3 VDC	HCMOS/LVTTL	YES	500 KHz - 40 MHz	C. C.
<u>XH30N</u>	2.5 VDC	HCMOS	YES	500 KHz - 40 MHz	
<u>XH30R</u>	1.8 VDC	HCMOS	YES	500 KHz - 40 MHz	"J" Leads

Updated Nov 10, 2019





Xsis Electronics is qualified on the following QPL (M55310) Crystal Oscillators:

<u>M55310/08, M55310/09, M55310/11, M55310/14, M55310/15, M55310/16</u> <u>M55310/17, M55310/18, M55310/19, M55310/21, M55310/26, M55310/27, M55310/30</u> <u>M55310/33, M55310/34, M55310/35, M55310/36, M55310/37, M55310/38, M55310/39</u> & <u>M55310/40</u>.

Type Number	Supply Voltage	Output Type	Output Enable	Frequency Range	Package Outline
<u>M55310/08</u>	5.0 VDC	TTL	No	100.0 Hz - 50.0 MHz	14 Pin DIP
<u>M55310/09</u>	5.0 VDC	TTL	No	400.0 KHz - 60.0 MHz	8 Pin
<u>M55310/11</u>	5 to 15 VDC	CMOS	No	50 KHz - 10.0 MHz	14 Pin DIP
<u>M55310/14</u>	5.0 VDC	TTL	No	100.0 Hz - 25.0 MHz	14 Pin DIP
<u>M55310/15</u>	5 to 15 VDC	CMOS	No	5.25 Hz - 10.0 MHz	14 Pin DIP
<u>M55310/16</u>	5.0 VDC	TTL	No	100.0 Hz - 80.0 MHz	14 Pin DIP
<u>M55310/17</u>	5.0 VDC	TTL (GATE D)	Yes	250.0 KHz - 50.0 MHz	14 Pin DIP
<u>M55310/18</u>	5 to 15 VDC	CMOS	No	5.25 Hz - 15.0 MHz	14 Pin DIP
<u>M55310/19</u>	5.0 VDC	TTL	No	1.0 MHz - 60.0 MHz	.485" Sq. LCC
<u>M55310/21</u>	5.0 VDC	TTL	No	1.0 MHz - 60.0 MHz	20 Leads FP
<u>55310/26</u> (14 Pin)	5.0 VDC	HCMOS	No	10.0 KHz - 65.0 MHz	14 Pin DIP
<u>M55310/26</u> <u>(4 Pin)</u>	5.0 VDC	HCMOS	No	10.0 KHz - 65.0 MHz	4 Pin DIP
<u>M55310/27</u>	5.0 VDC	HCMOS	Yes	1.0 MHz - 85.0 MHz	RUM-148 25.41220 mm Amount
<u>M55310/30</u>	3.3 VDC	HCMOS	Yes	450.0 KHz - 85.0 MHz	9 x 14mm "J" Leads

M55310/34 3.3 VDC HCMOS Yes 500 KHz - 85.0 MHz	
M55310/35 2.5 VDC HCMOS Yes 1.0 MHz - 100.0 MHz	
M55310/36 1.8 VDC HCMOS Yes 1.0 MHz - 100.0 MHz "J" Leads	
M55310/37 5.0 VDC HCMOS Yes 500 KHz - 85.0 MHz 7 x 9 mm	
M55310/37 5.0 VDC HCMOS Yes 500 KHz - 85.0 MHz	
M55310/39 2.5 VDC HCMOS Yes 1.0 MHz - 100.0 MHz	
<u>M55310/40</u> 1.8 VDC HCMOS Yes 1.0 MHz - 100.0 MHz "Formed" Leads	

Updated Nov 10, 2019



High Reliability Hybrid Microcircuit Crystal Oscillators & Crystal Units



Military/Aerospace Crystal Oscillators

Xsis Electronics Standard Crystal Oscillators utilize advanced designs and hybrid microcircuit technology as per MIL-PRF-55310 and MIL-PRF-38534. These oscillators are designed and processed for Military and Aerospace applications and can withstand high shock and vibration. Exceptionally good frequency aging characteristics are achieved by the use of precision quartz crystals manufactured using in-house proprietary processes. Contact Xsis Engineering for your special requirements.

MILITARY / AEROSPACE CRYSTAL OSCILLATORS Click "Type Number" to open a Detail (pdf Version) Specification Sheet

Type Number	Supply Voltage	Output Type	Output Enable	Frequency Range	Package Outline
XC5A	5.0 VDC	HCMOS/TTL	YES	30 KHz - 105 MHz	5 x 7 mm
XC5L	3.3 VDC	HCMOS/TTL	YES	7.5 KHz - 160 MHz	
XC5N	2.5 VDC	HCMOS	YES	500 KHz - 135 MHz	
XC5R	1.8 VDC	HCMOS	YES	500 KHz - 100 MHz	Lead Less
<u>XE51A</u>	5.0 VDC	HCMOS/TTL	Yes	500 KHz - 100 MHz	5 x 7 mm
<u>XE51L</u>	3.3 VDC	HCMOS/TTL	Yes	500 KHz - 160 MHz	
<u>XE51N</u>	2.5 VDC	HCMOS	Yes	500 KHz - 135 MHz	
<u>XE51R</u>	1.8 VDC	HCMOS	Yes	500 KHz - 100 MHz	"Formed" Leads
<u>XE52A</u>	5.0 VDC	HCMOS/TTL	Yes	500 KHz - 100 MHz	5 x 7 mm
<u>XE52L</u>	3.3 VDC	HCMOS/TTL	Yes	500 KHz - 160 MHz	A Street
<u>XE52N</u>	2.5 VDC	HCMOS	Yes	500 KHz - 135 MHz	
<u>XE52R</u>	1.8 VDC	HCMOS	Yes	500 KHz - 100 MHz	"Gull Wing" Leads
<u>XE53A</u>	5.0 VDC	HCMOS/TTL	Yes	500 KHz - 100 MHz	5 x 7 mm
<u>XE53L</u>	3.3 VDC	HCMOS/TTL	Yes	500 KHz - 160 MHz	and the second sec
<u>XE53N</u>	2.5 VDC	HCMOS	Yes	500 KHz - 135 MHz	
<u>XE53R</u>	1.8 VDC	HCMOS	Yes	500 KHz - 100 MHz	"Straight" Leads
<u>XE40-100</u>	5 VDC	TTL	Yes	450 KHz - 100 MHz	7 x 9 mm
<u>XE40-200</u>	5 VDC	HC/ACMOS	Yes	450 KHz - 100 MHz	
XE40-L00	3.3 VDC	HC/ACMOS/LVTTL	Yes	450 KHz - 160 MHz	
<u>XE40-N00</u>	2.5 VDC	LVHCMOS	Yes	450 KHz - 135 MHz	V V
<u>XE40-R00</u>	1.8 VDC	LVHCMOS	Yes	450 KHz - 100 MHz	"J" Leads
<u>XE41-100</u>	5 VDC	TTL	Yes	450 KHz - 100 MHz	7 x 9 mm
<u>XE41-200</u>	5 VDC	HC/ACMOS	Yes	450 KHz - 100 MHz	
<u>XE41-L00</u>	3.3 VDC	LVHCMOS	Yes	450 KHz - 160 MHz	
<u>XE41-N00</u>	2.5 VDC	LVHCMOS	Yes	450 KHz - 135 MHz	
<u>XE41-R00</u>	1.8 VDC	LVHCMOS	Yes	450 KHz - 100 MHz	"Formed" Leads
<u>XE42-100</u>	5 VDC	TTL	Yes	450 KHz - 100 MHz	7 x 9 mm
<u>XE42-200</u>	5 VDC	HC/ACMOS	Yes	450 KHz - 100 MHz	- 111
XE42-L00	3.3 VDC	LVHCMOS	Yes	450 KHz - 160 MHz	
XE42-N00 XE42 R00	2.5 VDC 1.8 VDC	LVHCMOS	Yes	450 KHz - 135 MHz	"Gull Wing" Leads
<u>XE42-R00</u>	1.8 VDC	LVHCMOS	Yes	450 KHz - 100 MHz	Our wing Leaus

XE43-100	5 VDC	TTL	Yes	450 KHz - 100 MHz	7 x 9 mm
<u>XE43-200</u>	5 VDC	HC/ACMOS	Yes	450 KHz - 100 MHz	A Street
XE43-L00	3.3 VDC	HC/ACMOS/LVTTL	Yes	450 KHz - 160 MHz	
XE43-N00	2.5 VDC	LVHCMOS	Yes	450 KHz - 135 MHz	
XE43-R00	1.8 VDC	LVHCMOS	Yes	450 KHz - 100 MHz	"Straight" Leads
XE30-100	5 VDC	TTL	Yes	400 KHz - 90 MHz	9 x 14 mm
XE30-200A	5 VDC	HC/ACMOS	Yes	400 KHz - 90 MHz	10.00-145 25.457200 mm
11200 20011			100		XBS STORE 5130
<u>XE30-L00</u>	3.3 VDC	HC/ACMOS/TTL	Yes	400 KHz - 100 MHz	"J" Leads
<u>XE20-100</u>	5 VDC	TTL	Yes	400 KHz - 90 MHz	TO (Round)
<u>XE20-200A</u>	5 VDC	HC/ACMOS	Yes	400 KHz - 90 MHz	
XE20-L00A	3.3 VDC	HC/ACMOS/TTL	Yes	400 KHz - 100 MHz	
XE15-100	5 VDC	TTL	Yes	100 KHz - 90 MHz	4 Pin Half DIP
					NEWS COLOR
<u>XE15-100</u>	5 VDC	TTL	Yes	100 KHz - 90 MHz	a king size
<u>XE15-100</u>	5 VDC	TTL	Yes	100 KHz - 90 MHz	
<u>X100</u>	5 VDC	TTL	Yes	60 Hz - 100 MHz	
M100	5 VDC	TTL	No	60 Hz - 60 MHz	
E100	5 VDC	TTL	No	60 Hz - 25 MHz	
X200	5 to 15 VDC	CMOS	No	1.5Hz - 12 MHz	14 Pin DIP
X200A (B)	5 VDC	HC/ACMOS	Yes	5 Hz - 100 MHz	141 m Di
X3200	3.3 VDC	LVHCMOS	Yes	100 KHz - 160 MHz	THE STATISTICS
XL00	3.3 VDC	LVHCMOS	Yes	100 KHz - 160 MHz	1500
XN00	2.5 VDC	LVHCMOS	Yes	100 KHz - 135 MHz	
XR00	1.8 VDC	LVHCMOS	Yes	100 KHz - 100 MHz	
X300	- 5.2 VDC	ECL	No	10 MHz - 220 MHz	
X300A	- 4.5 VDC	ECL	No	10 MHz - 220 MHz	
T100	5 VDC	TTL	Yes	60 Hz - 100 MHz	
T200	5 to 15 VDC	CMOS	No	1.5 Hz - 12 MHz	
T200A (B)	5 VDC	HC/ACMOS	Yes	5 Hz - 100 MHz	4 Pin DIP
T3200	3.3 VDC	LVHCMOS	Yes	100 KHz - 160 MHz	- at and
TN00	2.5 VDC	LVHCMOS	Yes	100 KHz - 100 MHz	and they are
TR00	1.8 VDC	LVHCMOS	Yes	100 KHz - 100 MHz	
T300	-5.2 VDC	ECL	No	10 MHz - 220 MHz	The second se
T300A	-4.5 VDC	ECL	No	10 MHz - 220 MHz 10 MHz - 220 MHz	
XE10-100	5 VDC	TTL	Yes	200 KHz - 90 MHz	LCC
XE10-200A	5 VDC	HC/ACMOS	Yes	200 KHz - 90 MHz 200 KHz - 90 MHz	Sterre Anno
<u>XE10-L00</u>	3.3 VDC	HC/ACMOS	Yes	200 KHz - 100 MHz	Surface Mount
<u>XE101-100</u>	5 VDC	TTL	Yes	200 KHz - 90 MHz	"J" Leads
<u>XE101-200A</u>	5 VDC	HC/ACMOS	Yes	200 KHz - 90 MHz	
XE101-L00	3.3 VDC	HC/ACMOS	Yes	400 KHz - 100 MHz	Surface Mount
<u>XE102-100</u>	5 VDC	TTL	Yes	400 KHz - 90 MHz	Gull Wing Leads
<u>XE102-200A</u>	5 VDC	HC/ACMOS	Yes	400 KHz - 90 MHz	1 2 6357
<u>XE102-L00</u>	3.3 VDC	HC/ACMOS	Yes	400 KHz - 100 MHz	Surface Mount
					Undated Nov 10, 2019

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Xsis Electronics is qualified on the following QPL (MIL-PRF-3098) Crystal Units:

<u>CR55/U</u>, <u>CR60/U</u>, <u>CR61/U</u>, <u>CR64/U</u>, <u>CR67/U</u>, <u>CR79/U</u>, <u>CR76/U</u>, <u>CR77/U</u>, <u>CR78/U</u>, <u>CR79/U</u>, <u>CR81/U</u>, <u>CR84/U</u>, <u>CR97/U</u>, <u>CR98/U</u>, <u>CR105/U</u>, <u>CR106/U</u>, <u>CR107/U</u> <u>CR110/U</u>, <u>CR116/U</u>, <u>CR117/U</u>, <u>CR122/U</u>, <u>CR123/U</u>, <u>CR139/U</u>, <u>CR149/U</u>, <u>CR151/U</u>, <u>CR152/U</u>

QPL (MIL-PRF-3098) CRYSTAL UNITS Click "Type Number" to open a Detail (pdf Version) Specification Sheet

Type Number	Slash Sheet	Mode	Load (pF)	Frequency Range (MHz)	Package Outline
<u>CR55/U</u>	MIL-PRF-3098/33	3rd	Series	17.000 - 61.000	
<u>CR60/U</u>	MIL-PRF-3098/38	Fund.	Series	5.000 - 20.000	
<u>CR61/U</u>	MIL-PRF-3098/39	3rd	Series	17.000 - 61.000	
<u>CR64/U</u>	MIL-PRF-3098/42	Fund.	30	2.900 - 20.000	STORE LEEP
<u>CR67/U</u>	MIL-PRF-3098/45	3rd	Series	17.000 - 61.000	
<u>CR69/U</u>	MIL-PRF-3098/47	Fund.	30	2.900 - 25.000	HC-49
<u>CR72/U</u>	MIL-PRF-3098/50	3rd	Series	17.000 - 61.000	
<u>CR76/U</u>	MIL-PRF-3098/53	3rd	Series	16.000 - 61.000	
<u>CR77/U</u>	MIL-PRF-3098/55	3rd	Series	17.000 - 61.000	
<u>CR78/U</u>	MIL-PRF-3098/62	Fund.	30	2.900 - 20.000	Sectory Contraction
<u>CR79/U</u>	MIL-PRF-3098/63	Fund.	Series	2.900 - 20.000	HC50
<u>CR81/U</u>	MIL-PRF-3098/58	3rd	Series	17.000 - 61.000	11050
<u>CR84/U</u>	MIL-PRF-3098/61	3rd	Series	17.000 - 61.000	
<u>CR97/U</u>	MIL-PRF-3098/72	Fund.	32	8.000 - 10.000	HC-49
<u>CR98/U</u>	MIL-PRF-3098/73	5th	Series	50.000 - 134.000	HC-50
<u>CR105/U</u>	MIL-PRF-3098/80	5th	Series	48.000 - 125.000	
<u>CR106/U</u>	MIL-PRF-3098/82	Fund.	32	10.500 - 11.500	Constanting of the State
<u>CR107/U</u>	MIL-PRF-3098/83	5th	Series	50.000 - 125.000	Leis t
<u>CR110/U</u>	MIL-PRF-3098/86	5th	Series	62.500 - 75.000	HC-49
<u>CR116/U</u>	MIL-PRF-3098/92	5thj	Series	50.000 - 125.000	
<u>CR117/U</u>	MIL-PRF-3098/93	3rd	Series	30.000 - 61.000	HC-50
<u>CR122/U</u>	MIL-PRF-3098/99	5th	Series	50.000 - 125.000	
<u>CR123/U</u>	MIL-PRF-3098/100	5th	Series	50.900 - 125.000	Mar
<u>CR139/U</u>	MIL-PRF-3098/118	Fund.	30	20.000 - 22.000	STORE LEng
<u>CR149/U</u>	MIL-PRF-3098/130	5th	Series	46.000 - 100.000	
<u>CR151/U</u>	MIL-PRF-3098/132	5th	Series	50.000 - 100.000	HC-49
CR152/U	MIL-PRF-3098/133	3rd	Series	16.000 - 61.000	
					Updated Nov 10, 2019



High Reliability Hybrid Microcircuit Crystal Oscillators & Crystal Units



Surface Mount Crystal Units

At Xsis, we specialize in the design and manufacturing of High Reliability Crystal Units for Military, Space, Industrial and Telecommunication Applications. Xsis is on the Qualified Products List (QPL) for MIL-PRF-3098 Military Crystal Units.

Xsis Electronics can meet your surface mount Crystal requirements. We can also provide equivalent surface mount Crystal Units to meet your system needs. Some of our standard surface mount Crystal Units are shown in the table below. Please e-mail or call us to let us know your requirements.

Complete in-house environmental and electrical testing capabilities enable us to provide full qualification and reliability assurance processing for the most demanding requirements. Exceptionally good frequency aging characteristics are achieved by the use of precision quartz crystals manufactured using in-house proprietary processes developed and improved with 41+ years of experience.

SURFACE MOUNT CRYSTAL UNITS Click "Type Number" to open a Detail (pdf Version) Specification Sheet

Type Number	Oscillation Mode	Frequency Range	Operating Temperature	Frequency Tolerance	Package Outline
XCR-1xxx	Fundamental	2.5 MHz - 25 MHz	As Required	As Required.	Surface Mount HC49
XCR-1xxx	3rd Overtone	15 MHz - 75 MHz	As Required	As Required.	XCR-10000 4M000000
XCR-1xxx	5th Overtone	50 MHz - 125 MHz	As Required	As Required.	Star 1
XCR-2xxx	Fundamental	6.4 MHz - 25 MHz	As Required	As Required.	Surface Mount HC52
XCR-2xxx	3rd Overtone	20 MHz - 75 MHz	As Required	As Required.	ACR 2004 and 100
XCR-2xxx	5th Overtone	50 MHz - 125 MHz	As Required	As Required.	A A A A A A A A A A A A A A A A A A A

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