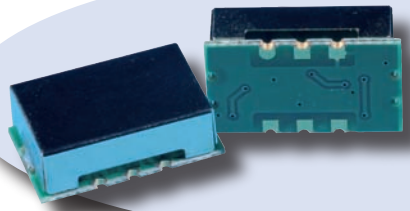
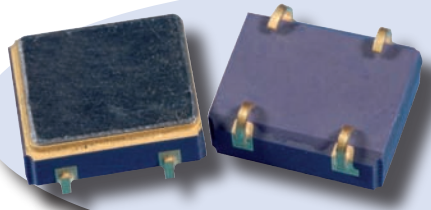
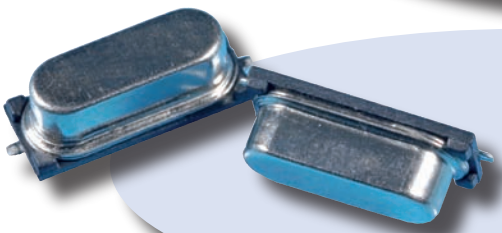
PDI PRODUCTS



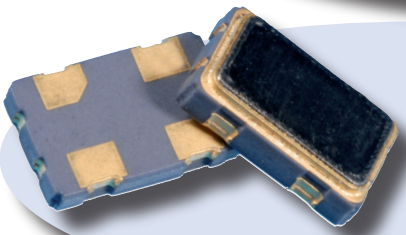
Telecoms



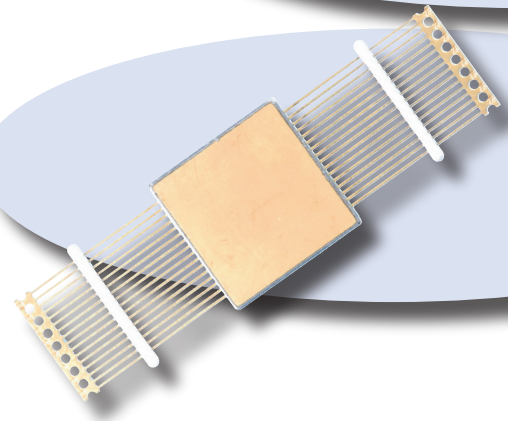
Military



Automotive

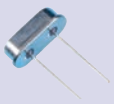
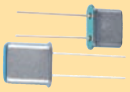
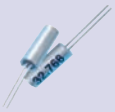
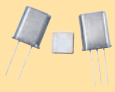
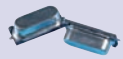
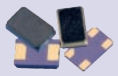
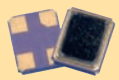
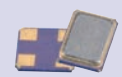
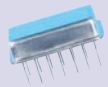
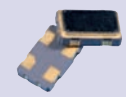


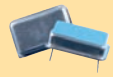
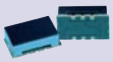
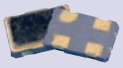
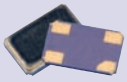
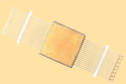
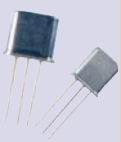
Wireless



Space

Precision Devices
Frequency Control Solutions

		Size (All dimensions mm)	Frequency Range (MHz)	Details
LEADED CRYSTALS		HC-49U 13.46 x 10.24 x 3.8 (H x W x D)	1.8432 to 200.00	The HC-49U series is an industrial standard AT cut crystal. Ideal for use as a pullable crystal. Also available in gull wing or third lead format.
		HC-49S 3.5 x 10.24 x 3.7 2.5 x 10.24 x 3.7 (H x W x D)	3.2 to 66.0	AT or BT cut strip crystal in the resistant welded low profile package is available in a height of either 3.5mm or 2.5mm.
		UM1 8.0 x 6.9 x 3.0 UM5 6.0 x 6.9 x 3.0 (H x W x D)	8.0 to 200.0	Highly reliable resistant weld packaged crystal available in the two industry standard packages. Available with a third lead and also gull wing or metal jacket.
		T1 4.9 x 1.4 T6 6.0 x 2.0 T8 8.0 x 3.0 (L x ø)	0.032768	Tuning fork quartz crystal (watch crystal) available in range of small tubular metal packaging. Excellent aging characteristics.
		MIL - C - 3098	2.2 to 25.0	The range of MIL-C-3098 QPL approved crystals are available in a range of packages dependent on the MIL-PRF-3098/ code required by the customer.
SMD CRYSTALS		HC49/USMD 4.0 x 10.24 x 3.8 3.2 x 10.24 x 3.8 (H x W x D)	3.2 to 100.0	This SMD industrial standard packaged crystal in either AT or BT cut strip crystal is available in a 4.0 or 3.2mm high package. Also available in a 4 pad option. Automotive grade available.
		7.0 x 5.0 x 1.1 7.0 x 5.0 x 1.3 (L x W x H)	6.0 to 100.0	This 7x5mm ceramic packaged SMD crystal is available with either 2 or 4 pads. Automotive grade available. Available/Crystal.
		5.0 x 3.2 x 0.9 5.0 x 3.2 x 1.2 (L x W x H)	12.0 to 54.0	Available in a 2 pad, 1.2mm high, ceramic package or a 4 pad, 0.8mm high, ceramic package with metal lid.
		3.2 x 2.5 x 0.65 (L x W x H)	12.0 to 54.0	Compact ultra thin package which makes this crystal ideal for OA/AV and RF applications including Bluetooth, ZigBee and ISM. Excellent heat and shock resistance.
		2.5 x 2.0 x 0.55 (L x W x H)	16.0 to 80.0	Very compact and thin crystal ideal for OA/AV and RF applications including Bluetooth, ZigBee and ISM. Excellent heat and shock resistance.
		2.0 x 1.6 x 0.5 (L x W x H)	20.0 to 80.0	Currently our smallest crystal package available in a 4 pad ceramic base with a metal lid. Ideal for RF applications including Bluetooth, ZigBee and ISM.
		8.0 x 3.8 x 2.5 6.9 x 1.4 x 1.4 4.1 x 1.5 x 0.75 3.2 x 1.5 x 0.75 (L x W x H)	0.032768	A wide range of SMD packaged tuning fork quartz crystal (watch crystal) with excellent aging characteristics.
LEADED OSCILLATORS		14 & 8 Pin DIL 20.4 x 12.9 x 5.08 12.9 x 12.9 x 5.6 (L x W x H)	0.5 to 150.0	These industry standard 14 pin and 8 pin DIL metal can oscillators are available with either 5v or 3.3v HCMOS/TTL output as standard and tri-state as an option.
		MIL - O - 55310	2.2 to 25.0	The range of MIL-O-55310 QPL approved oscillators are available in a range of packages dependent on the MIL-O-55310/ code required by the customer.
SMD OSCILLATORS		7.0 x 5.0 x 1.5 (L x W x H)	1.0 to 800.0	Available in 1.8v, 2.8v, 3.3v and 5v. Output either HCMOS, PECL or LVDS. 4 or 6 pad package. Low jitter part available. Ideal for ethernet, fibre and optical applications.
		5.0 x 3.2 x 1.3 (L x W x H)	1.544 to 125.0	Ultra miniature packaged clock oscillator with a TTL/CMOS output available in 1.8v, 2.8v, 3.3v and 5v.
		3.2 x 2.5 x 1.2 (L x W x H)	1.544 to 80.0	Ultra miniature packaged clock oscillator with a TTL/CMOS output available in 1.8v, 2.8v and, 3.3v.
		8.9 x 7.4 x 3.3 (L x W x H)	0.750 to 200.0	J-leaded oscillator available in 2.5v or 3.3v with ACMOS output. Operating temperature range up to -55°C to +125°C makes this part ideal for Military, Space and high end telecom applications. MIL-O-55310

		Size (All dimensions mm)	Frequency Range (MHz)	Details
LEADED VCXO's		20.6 x 13.0 x.6.0 (L x W x H)	4.0 to 100.0	Available in 5v and 3.3v with a HCMOS/TTL output. The control voltage range of +/-100ppm minimum ensures an absolute pull range of at least +/-50ppm.
SMD VCXO's		14.0 x 9.6 x 6.4 (L x W x H)	4.0 to 100.0	This FR4 based SMD VCXO is available in both 3.3v and 5v with a HCMOS/TTL output.
		7.0 x 5.0 x 1.7 7.5 x 5.0 x 2.65 (L x W x H)	2.0 to 200.0 19.44 to 250.0	Available with a TTL/CMOS or LVCMOS output in a 4 or 6 pad package. Also available with a PECL and LVDS output in a 6 pad package.
		5.0 x 3.2 x 1.2 (L x W x H)	1.5 to 50.0	Available in 3.3v and 5v with a HCMOS output in a 4 pad package. In both commercial and industrial temperature ranges with a pullability of +/-50ppm to +/-150ppm.
LEADED TCXO's		20.75 x 20.75 x 10.75 (L x W x H)	20.0 to 400.0	Available in both 5v and 3.3v with a Clipped sine-wave output. Frequency adjustment by internal trimmer. Voltage control an option. Ideal for telecoms, base station and test instrumentation applications.
		18.6 x 12.2 x 8.6 (L x W x H)	4.0 to 50.0	Available in both 5v and 3.3v with either a HCMOS/TTL or Clipped Sine-wave output. Frequency adjustment by internal trimmer. Voltage control an option. Ideal for telecom and instrumentation applications.
SMD TCXO's		21.3 x 11.7 x 5.0 (L x W x H)	8.0 to 100.0	Available in both 5v and 3.3v with either a HCMOS/TTL or Clipped Sine-wave output. Frequency adjustment by either internal trimmer or voltage control an option. Ideal for telecom, GPS and instrumentation applications.
		11.4 x 11.4 x 4.5 (L x W x H)	10.0 to 45.0	Available in both 5v and 3.3v with either a HCMOS/TTL or Clipped Sine-wave output. Frequency adjustment by internal trimmer. Voltage control an option. Ideal for telecom, GPS and instrumentation applications.
		7.0 x 5.5 x 1.9 7.0 x 5.0 x 2.5 (L x W x H)	10.0 to 26.0 1.0 to 156.0	Clipped Sine-wave output with frequency range of 10.0 to 26.0MHz and HCMOS output available with frequency range of 1.0 to 156.0MHz. Ideal for telecom, RF and synthesiser applications
		5.0 x 3.2 x 1.5 (L x W x H)	12.5 to 26.	Available in either 5v or 3.3v with a clipped Sine-wave output. Frequency range means that this is ideal for Synthesiser, Bluetooth, GSM and ISM applications
SPACE		22.0 x 13.0 x 5.0 35.0 x 25.0 x 7.0 25.0 x 25.0 x 5.0 (L x W x H)	1.0 to 100.0	MIL - PRF - 38534 and MIL - PRF - 55310 Space class oscillator, VCXO or TCXO available in either a 14 pin dil leaded package or a 24 pin or 14 pin gold flat package which is available in gull wing format.
OCXO's		51.0 x 51.0 x 25.0 down to 20.3 x 13.2 x 8.0 (L x W x H)	4.0 to 100.0	A wide range of packages available with 12v, 5v or 3.3v power supply. Clipped Sine-wave and HCMOS output. Low phase noise, low aging and high stability ideal for Stratum 3, Cospas Sarsat, base station, broadcast, instrumentation and GPS applications.
LEADED FILTERS		60.45 x 25.4 x Variable 44.45 x15.26 x Variable 38.35 x18.20 x 15.90 (L x W x H)	0.455 to 250.0	Discrete filter assembly, 2 to 10 poles, available in three different package sizes. Through hole or BNC connection available. Ideal for telecoms, instrumentation, avionics and base station applications.
		11.7 x 10.21 x 3.71 8.0 x 10.21 x 2.2 (H x W x D)	5.0 to 150.0	Monolithic filter assembly, 2 to 12 poles, Gull wing with metal jacket for SMT option available, Ideal for telecoms, instrumentation, avionics and base station applications.
SMD FILTERS		7.2 x 5.0 x 1.5 (L x W x H)	21.4 to 130.0	SMT Monolithic filter in a 7 x 5mm, 6 pad, ceramic package. 2 pole covering the common 21.4MHz, 21.7MHz, and 45MHz filter frequencies.

APPLICATIONS

APPLICATIONS	CRYSTALS	OSCILLATORS	VCXO's	TCXO's	OCXO's	FILTERS
ADSL		■	■			
Audio	■	■				
Automotive	■					
Bluetooth	■					
Broadcast		■	■	■	■	
Cospas Sarsat					■	
DAB Radio	■	■				
Desk Telephone	■					
DVD / Video	■	■				
Fibre Channel		■	■			
Gb Ethernet		■	■			
GPS	■			■		
Keyless Entry	■					
Low Power Radio	■			■		
Metering	■					
Microprocessor	■					
Military	■	■	■	■	■	■
MPEG	■	■				
Office Automation	■					
Optical Networks		■	■			
Pagers	■					■
PDA	■	■				
PMCIA	■					
Radio Comms	■	■	■	■	■	■
Real Time Clock	■					
SDH		■	■			
Set Top Box	■					
SONET		■	■			
Space	■	■	■	■	■	
Stratum 3				■	■	
Synthesiser				■		
Television	■					
WiMax	■	■				
Wireless LAN	■	■				
ZigBee	■					

About PDI

PDI are a leading global developer and manufacturer of frequency control products. With an established engineering heritage PDI can offer a comprehensive range of precision engineered crystals, crystal filters and oscillators, VCXO's, TCXO's and OCXO's. PDI supports customers in a wide range of industry sectors including avionics, space, defence, automotive, telecommunications and consumer. PDI is able to offer comprehensive technical and logistical support and solutions to meet specific customer requirements.

PDI is proud to be able to offer compliance with the following standards and certifications: ISO9001, ISO14001, TS16949, MIL PRF 3098, MIL PRF 38534, MIL PRF 790, NASA/JPL-1348.