

ABRACON Microprocessor Crystals



ABLS/ABLS2 SERIES SMD MICROPROCESSOR CRYSTALS, HC49SM, 12.7 X 4.7MM

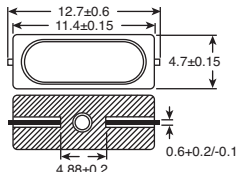
RoHS compliant This product is RoHS compliant.



HC/49US ULTRA LOW ESR SMD CRYSTAL

ABLS Series Features:

- Operating temperature: -55°C to +125°C
- Frequency tolerance: ±30ppm
- 18pF load capacitance
- Stability: ±100ppm
- Dimensions: 11.4x4.7x4.2mm



ABLS2 Series Features:

- Operating temperature: -40°C to +85°C
- Frequency tolerance: ±30ppm
- 18pF load capacitance
- Stability: ±30ppm
- Dimensions: 11.4x4.7x3.3mm



DIMENSIONS: mm

For quantities of 1000 and up, call for quote.

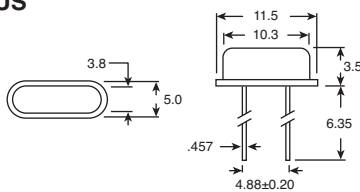
MOUSER STOCK NO.	Abracon Part No.	Frequency (MHz)	Price Each				
			1	10	50	100	500
ABLS Series							
815-ABLS-3.686ML4Q-T	ABLS-3.6864MHZ-L4Q-T	3.68640	1.05	.91	.79	.63	.53
815-ABLS-6.0ML4Q-T	ABLS-6.000MHZ-L4Q-T	6.00000	1.05	.91	.79	.63	.53
815-ABLS-8.0ML4Q-T	ABLS-8.000MHZ-L4Q-T	8.00000	1.05	.91	.79	.63	.53
815-ABLS-10.0ML4Q-T	ABLS-10.000MHZ-L4Q-T	10.00000	1.05	.91	.79	.63	.53
815-ABLS-12.0ML4Q-T	ABLS-12.000MHZ-L4Q-T	12.00000	1.05	.91	.79	.63	.53
815-ABLS-12.28ML4Q-T	ABLS-12.288MHZ-L4Q-T	12.28800	1.05	.91	.79	.63	.53
815-ABLS-14.32ML4Q-T	ABLS-14.31818MHZ-L4Q-T	14.31818	1.05	.91	.79	.63	.53
815-ABLS-16.0ML4Q-T	ABLS-16.000MHZ-L4Q-T	16.00000	1.05	.91	.79	.63	.53
815-ABLS-18.43ML4Q-T	ABLS-18.432MHZ-L4Q-T	18.43200	1.05	.91	.79	.63	.53
815-ABLS-20.0ML4Q-T	ABLS-20.000MHZ-L4Q-T	20.00000	1.05	.91	.79	.63	.53
815-ABLS-24.0ML4QF-T	ABLS-24.000MHZ-L4QF-T	24.00000	1.05	.91	.79	.63	.53
815-ABLS-25.0ML4QF-T	ABLS-25.000MHZ-L4QF-T	25.00000	1.05	.91	.79	.63	.53
815-ABLS-26.0ML4QF-T	ABLS-26.000MHZ-L4QF-T	26.00000	1.05	.91	.79	.63	.53
815-ABLS-27.0ML4QF-T	ABLS-27.000MHZ-L4QF-T	27.00000	1.05	.91	.79	.63	.53
ABLS2 Series							
815-ABLS2-3.6-D4Y-T	ABLS2-3.6864MHZ-D4Y-T	3.68640	.63	.55	.48	.38	.32
815-ABLS2-6-D4Y-T	ABLS2-6.000MHZ-D4Y-T	6.00000	.63	.55	.48	.38	.32
815-ABLS2-8.1-D4Y-T	ABLS2-8.192MHZ-D4Y-T	8.19200	.63	.55	.48	.38	.32
815-ABLS2-10-D4Y-T	ABLS2-10.000MHZ-D4Y-T	10.00000	.63	.55	.48	.38	.32
815-ABLS2-12-D4Y-T	ABLS2-12.000MHZ-D4Y-T	12.00000	.63	.55	.48	.38	.32
815-ABLS2-12.2-D4Y-T	ABLS2-12.288MHZ-D4Y-T	12.25500	.63	.55	.48	.38	.32
815-ABLS2-14.3-D4Y-T	ABLS2-14.31818MHZ-D4Y-T	14.31818	.63	.55	.48	.38	.32
815-ABLS2-16-D4Y-T	ABLS2-16.000MHZ-D4Y-T	16.00000	.63	.55	.48	.38	.32
815-ABLS2-18.4-D4Y-T	ABLS2-18.432MHZ-D4Y-T	18.43200	.63	.55	.48	.38	.32
815-ABLS2-20-D4Y-T	ABLS2-20.000MHZ-D4Y-T	20.00000	.63	.55	.48	.38	.32
815-ABLS2-24-D4YF-T	ABLS2-24.000MHZ-D4YF-T	24.00000	.64	.566	.494	.391	.329
815-ABLS2-25-D4YF-T	ABLS2-25.000MHZ-D4YF-T	25.00000	.64	.566	.494	.391	.329
815-ABLS2-26-D4YF-T	ABLS2-26.000MHZ-D4YF-T	26.00000	.64	.566	.494	.391	.329
815-ABLS2-27-D4YF-T	ABLS2-27.000MHZ-D4YF-T	27.00000	.64	.566	.494	.391	.329



ABL SERIES MICROPROCESSOR CRYSTALS, LEADED, HC49US

Features:

- Operating temperature: -20°C to +70°C
- Frequency tolerance: ±20ppm
- 18pF load capacitance
- Stability: ±50ppm (-20°C to +70°C)



DIMENSIONS: mm

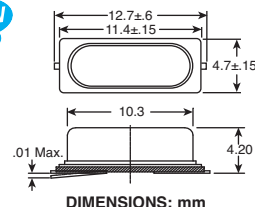
For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	Abracon Part No.	Frequency (MHz)	Price Each				
			1	10	50	100	500
815-ABL-3.57954B2	ABL-3.579545MHZ-B2	3.57955	.39	.33	.30	.27	.22
815-ABL-3.6864-B2	ABL-3.6864MHZ-B2	3.6864	.39	.33	.30	.27	.22
815-ABL-4-B2	ABL-4.000MHZ-B2	4.0000	.39	.33	.30	.27	.22
815-ABL-4.096-B2	ABL-4.096MHZ-B2	4.0960	.39	.33	.30	.27	.22
815-ABL-4.9152-B2	ABL-4.9152MHZ-B2	4.9152	.39	.33	.30	.27	.22
815-ABL-6-B2	ABL-6.000MHZ-B2	6.0000	.39	.33	.30	.27	.22
815-ABL-7.3728-B2	ABL-7.3728MHZ-B2	7.3728	.39	.33	.30	.27	.22
815-ABL-8-B2	ABL-8.000MHZ-B2	8.0000	.39	.33	.30	.27	.22
815-ABL-8.192-B2	ABL-8.192MHZ-B2	8.1920	.39	.33	.30	.27	.22
815-ABL-9.8304-B2	ABL-9.8304MHZ-B2	9.8304	.39	.33	.30	.27	.22
815-ABL-10-B2	ABL-10.000MHZ-B2	10.0000	.39	.33	.30	.27	.22
815-ABL-11.0592-B2	ABL-11.0592MHZ-B2	11.0592	.39	.33	.30	.27	.22
815-ABL-12-B2	ABL-12.000MHZ-B2	12.0000	.39	.33	.30	.27	.22
815-ABL-12.288-B2	ABL-12.288MHZ-B2	12.2880	.39	.33	.30	.27	.22
815-ABL-14.31818B2	ABL-14.31818MHZ-B2	14.31818	.39	.33	.30	.27	.22
815-ABL-14.7456-B2	ABL-14.7456MHZ-B2	14.7456	.39	.33	.30	.27	.22
815-ABL-16-B2	ABL-16.000MHZ-B2	16.0000	.39	.33	.30	.27	.22
815-ABL-16.128-B2	ABL-16.128MHZ-B2	16.1280	.39	.33	.30	.27	.22
815-ABL-16.384-B2	ABL-16.384MHZ-B2	16.3840	.39	.33	.30	.27	.22
815-ABL-18.432-B2	ABL-18.432MHZ-B2	18.4320	.39	.33	.30	.27	.22
815-ABL-19.6608-B2	ABL-19.6608MHZ-B2	19.6608	.39	.33	.30	.27	.22
815-ABL-20-B2	ABL-20.000MHZ-B2	20.0000	.39	.33	.30	.27	.22
815-ABL-22.1184-B2	ABL-22.1184MHZ-B2	22.1184	.39	.33	.30	.27	.22
815-ABL-24-B2	ABL-24.000MHZ-B2	24.0000	.41	.30	.26	.25	.23
815-ABL-24.576-B2F	ABL-24.576MHZ-B2F	24.5760	.39	.33	.30	.27	.22
815-ABL-25-B2F	ABL-25.000MHZ-B2F	25.0000	.39	.33	.30	.27	.22
815-ABL-27-B2F	ABL-27.000MHZ-B2F	27.0000	.39	.33	.30	.27	.22
815-ABL-32-B2F	ABL-32.000MHZ-B2F	32.0000	.39	.33	.30	.27	.22
815-ABL-40-B2F	ABL-40.000MHZ-B2F	40.0000	.39	.33	.30	.27	.22
815-ABL-48-B2	ABL-48.000MHZ-B2	48.0000	.39	.33	.30	.27	.22



Features:

- Ultra low ESR as low as 20 ohms for 4MHz, 85% lower than typical ABLS 4MHz
- Low negative resistance(-R) IC design can ensure high oscillation margin
- Tight stability and automotive grade temperature available
- Hermetically resistance weld sealed
- Designed to mate with next-generation micro controller and transceiver circuits enabling designers to arrive at low power solutions, without compromising performance
- Crystals are optimized to properly function under low drive level conditions of a few uW up to 500uW without impacting the gain margin of the oscillator loop



DIMENSIONS: mm

RoHS Compliant

For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	Abracon Part No.	Frequency (MHz)	Max ESR (Ω)	Price Each				
				1	10	50	100	200
815-ABLS-LR-3.0M-T	ABLS-LR-3.000MHZ-T	3.000000	30	3.60	3.24	2.88	2.59	2.45
815-ABLS-LR-3.072M-T	ABLS-LR-3.072MHZ-T	3.072000	30	3.60	3.24	2.88	2.59	2.45
815-ABLS-LR-3.27M-T	ABLS-LR-3.2768MHZ-T	3.276800	30	3.60	3.24	2.88	2.59	2.45
815-ABLS-LR-3.579M-T	ABLS-LR-3.579545MHZ-T	3.579545	30	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-3.686M-T	ABLS-LR-3.6864MHZ-T	3.686400	30	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-4.0M-T	ABLS-LR-4.000MHZ-T	4.000000	20	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-4.19M-T	ABLS-LR-4.194304MHZ-T	4.194304	20	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-4.43M-T	ABLS-LR-4.433619MHZ-T	4.433619	20	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-4.500M-T	ABLS-LR-4.500MHZ-T	4.500000	20	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-4.91M-T	ABLS-LR-4.9152MHZ-T	4.915200	20	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-5.0M-T	ABLS-LR-5.000MHZ-T	5.000000	20	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-6.0M-T	ABLS-LR-6.000MHZ-T	6.000000	20	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-6.144M-T	ABLS-LR-6.144MHZ-T	6.144000	20	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-6.74M-T	ABLS-LR-6.7458MHZ-T	6.745800	20	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-7.37M-T	ABLS-LR-7.3728MHZ-T	7.372800	15	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-8.0M-T	ABLS-LR-8.000MHZ-T	8.000000	15	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-9.216M-T	ABLS-LR-9.216MHZ-T	9.216000	15	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-9.83M-T	ABLS-LR-9.8304MHZ-T	9.830400	15	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-10.0M-T	ABLS-LR-10.000MHZ-T	10.000000	15	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-10.24M-T	ABLS-LR-10.240MHZ-T	10.240000	15	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-11.05M-T	ABLS-LR-11.0592MHZ-T	11.059200	15	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-12.0M-T	ABLS-LR-12.000MHZ-T	12.000000	15	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-12.28M-T	ABLS-LR-12.288MHZ-T	12.288000	15	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-13.0M-T	ABLS-LR-13.000MHZ-T	13.000000	10	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-13.50M-T	ABLS-LR-13.500MHZ-T	13.500000	10	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-14.31M-T	ABLS-LR-14.31818MHZ-T	14.318180	10	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-14.74M-T	ABLS-LR-14.7456MHZ-T	14.745600	10	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-15.0M-T	ABLS-LR-15.000MHZ-T	15.000000	10	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-15.36M-T	ABLS-LR-15.360MHZ-T	15.360000	10	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-16.0M-T	ABLS-LR-16.000MHZ-T	16.000000	10	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-16.38M-T	ABLS-LR-16.384MHZ-T	16.384000	10	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-16.93M-T	ABLS-LR-16.9344MHZ-T	16.934400	10	1.80	1.62	1.44	1.30	1.22
815-ABLS-LR-18.0M-T	ABLS-LR-18.000MHZ-T	18						