ABRACON
Innovation For Tomorrow's Designs®

Driving Innovation for Tomorrow's Designs

Abracon's Solutions for Transportation and Logistics Applications

Abracon offers an extensive range of crystal, oscillator, antenna, and magnetic products optimized for, and resistant to, the harsh operating environments commonly associated with transportation applications. Our transportation focused solutions offer enhanced efficiency, durability, performance, operating temperature range and quality when compared to traditional components making them the perfect solution for your transportation and automotive requirements.

Frequency Control & Timing Devices

Our range of automotive crystals and oscillators are TS 16949 Certified and AEC-Q200 qualified. We offer products with an operating temperature from -40 to 150 degrees Celsius in package sizes as small as 2.0 x 1.6 mm with options for 32kHz and various MHz frequency ranges.

RF & Antennas

Our antennas help navigate you to your destination and connect you and your vehicle to the world. Our range of automotive antennas includes AEC-Q200 internal ceramic patch and chip antennas, and IP67 puck and shark fin external antennas. Our products cover 4G/LTE, Dual Band Wi-Fi, GNSS (GPS, GLONASS, BeiDou, QZSS) and provide gain up to 5 dBi.

Power & Magnetics

Similarly, our automotive grade magnetic product meets all AEC-Q200 reliability requirements. Within our broad range of Power inductors, you will find inductors capable of handling up to 125A current saturation for DC-DC loads in wide operating temperature ranges up to +155°C. We also offer SMD common mode chokes for power and signal line filtering seen in powertrains and USB, CAN bus, and Ethernet communication lines.

Visit us at www.abracon.com to learn about our full range of products.

Inductors

PART NUMBER	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ) @ 1µH	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
AMDLA1004Q	0.15 - 100	2.0 - 44.0	0.6 - 310	20.0	3.3	-55°C to +155°C	11.0	10.0	4.0
ASPIAIG-S6055	3.3 - 330	0.6 - 4.6	26.0 - 1603	4.6	26.0	-40°C to +125°C	6.0	6.0	5.5
ASPIAIG-Q1010	2.2 - 15	12.5 - 29.0	2.8 - 19.3	-	-	-55°C to +155°C	11.9	11.0	9.7
ASPIAIG-Q1510	4.7 - 33.0	13.0 - 30.0	3.8 - 20.0	-	-	-55°C to +155°C	17.5	16.5	9.7

Common Mode Chokes

SERIES	IMPEDANCE (Ω) @ 100MHz Min	Typ.	DCR (mΩ) Max	RATED CURRENT (A) Max	RATED VOLTAGE (Vdc) Max	INSULATION RESISTANCE (M Ω) Min	OPERATING TEMPERATURE
ACMP-Q9050	500-2000	700-2700	9-32	3.5-6.0	80	10	-40°C to +125°C
ACMS-3225C	400-2200	550-4000	300-2200	0.4-0.15	80	10	-40°C to +150°C

Antennas

*Automotive-compliant

PART NUMBER	TYPE	FREQUENCY (MHz)	GAIN (dBi)	MOUNTING	POLARIZATION	PACKAGE SIZE (mm)	KEY FEATURES
AEACBK05 0048-C2LG	Dome	698-960 | 1710-2690 | 1575.42	2.38 | 1.96 | 2	Screw Mount	Linear | RHCP	Ø50 x 48	4G/LTE + GPS, IP66 Rated, 2xRG174,
AEACBK05 0048-MW2	Dome	2400-2483.5 | 4900-5825	2	Screw Mount	Linear	Ø50 x 48	2 x Dualband 2.4/5GHz WiFi MIMO
AEACBK05 0048-SW2	Dome	2400-2484 | 4900-5825	2.1 | 1.86	Screw Mount	Linear	Ø50 x 48	P67 rated, Dual-band, RG-174, SMA(M)
AEACMK066 0746-SG4	Dome	1561-1602	5	Screw Mount	RHCP	76 x Ø66.5	GNSS, Multi-band, Ultra-High gain, IP67
AECS1806C03Z	External	1561-1602	2 | 3 | 2	Screw Mount	RHCP | Linear	181.7 x 68.9 x 69.1	1x 4G/LTE, 1x 2.4/5GHz, 1x Active GNSS/

Frequency Control and Timing Devices

SERIES	TYPE	PACKAGE SIZE (mm) L	W	FREQUENCY	WIDEST AVAILABLE OPERATING TEMPERATURE RANGE
AUTOMOTIVE GRADE QUARTZ CRYSTALS					
ABS07AIG	XTAL	3.2	1.5	32.768 kHz	-40°C to +125°C
ABM11AIG	XTAL	2.0	1.6	16 to 60 MHz	-40°C to +150°C
ABM10AIG	XTAL	2.5	2.0	12 to 62.5 MHz	-40°C to +150°C
ABM8AIG	XTAL	3.2	2.5	8 to 54 MHz	-40°C to +150°C
FC3BA	XTAL	3.2	2.5	8 to 150 MHz	-55°C to +125°C
AUTOMOTIVE GRADE QUARTZ CRYSTAL OSCILLATORS					
ASEAIG5	SPXO	3.2	2.5	1.25 to 156.25 MHz	-40°C to +125°C
ASAAIG5	SPXO	2.0	1.6	1.25 to 100 MHz	-40°C to +125°C
ATXAIG-11	TCXO	3.2	2.5	10 to 52 MHz	-40°C to +85°C
ATXAIG-12	TCXO	2.5	2.0	10 to 52 MHz	-40°C to +85°C
ATXAIG-13	TCXO	2.0	1.6	10 to 52 MHz	-40°C to +85°C