



## CONVENIENT KEYFOBS ENABLE A BROAD SPECTRUM OF CONTACTLESS APPLICATIONS

- **Adaptable:**  
Virtually any LF or HF chip can be integrated.
- **Reliable:**  
Built by the leader in RFID transponders, constructed to withstand the rigors of daily use based on customer requirements.
- **Promotionally effective:**  
Practical shapes assure end-user credentials are always at hand, and can include a custom printed brand message.

Keyfobs make it easy for program participants to carry and present credentials, and are cost-effective to issue. They can enhance a broad spectrum of commercial and industrial applications, including contactless payment, vending, customer loyalty and other applications.

Customers choose a contactless chip to fit application requirements for operating frequency, memory capacity or anti-collision capability. The chip is securely encased in a keyfob housing that protects the electronics and optimizes performance. The electronics will perform over the life of the device based on projected normal exposure to impact, chemicals and fluctuating temperatures.

Keyfobs are available in a variety of standard shapes and colors, and may be printed with a logo or promotional message. Custom shapes or colors can also be produced to further emphasize brand recognition.

Provided by a leader in the application of radio frequency identification (RFID) technology, customers can rely on ASSA ABLOY engineering and manufacturing expertise to deliver the world's most advanced, reliable contactless keyfobs. Proven processes and automated manufacturing ensure high quality, as well as efficient and cost-effective production.

# SPECIFICATIONS



## TECHNOLOGY HIGHLIGHTS:

A wide range of 125 kHz and 13.56 MHz integrated chip options are available within a variety of standard shapes and sizes of ASSA ABLOY keyfobs. Fob housings are made of durable polycarbonate, or heat-resistant glass fiber-reinforced epoxy. Custom keyfob shapes, sizes, and colors available upon request.

## APPLICATION AREAS:

ASSA ABLOY keyfobs can be used in all contactless applications where a fob form factor provides a more convenient way for participants to carry and use their credentials. They are popular for managing physical access, time and attendance, and logical access as well as providing a vehicle for a variety of cashless payment applications including automatic fare collection, loyalty programs, point-of-sale, as well as NFC applications.

ASSA ABLOY can create a custom keyfob solution to fit your application requirements for chip type, dimensions, programming and materials.



	Dropfob	Tear Shape		Epoxy		Blueeye	Bobsleigh	
Frequency	LF/HF	LF	HF	LF	HF	LF	LF	HF
<b>ELECTRONIC</b>								
<b>Operating Frequencies</b>	125 kHz / 13.56 MHz	125 kHz	13.56 MHz	125 kHz	13.56 MHz	125 kHz	125 kHz	13.56 MHz
<b>Chip Types</b>	Unique, MIFARE EV1 1K, 4K (single chip or combo LF/HF)	Hitag S, Q5, Unique, ATA5577	MIFARE EV1 1K, MIFARE DESFire EV1 / EV2	Hitag S, Q5, Titan, Unique, ATA5577	MIFARE EV1 1K, Trusted Tag (NFC)	Hitag S, Q5, Unique, ATA5577		MIFARE EV1 1K
<b>Available Memory</b>	64 bit read-only to 4096 bit EEPROM	64 bit read-only to 2048 bit read-write	256 bit to 8192 byte EEPROM	64 bit read-only to 2048 bit read-write	1024 byte or 8192 byte EEPROM	64 bit read-only to 2048 bit read-write		1024 to 4096 byte EEPROM
<b>Anti-Collision</b>		Yes (Hitag)	Yes	Yes (Hitag)	Yes	Yes (Hitag)		Yes
<b>CHEMICAL AND MECHANICAL</b>								
<b>Dimensions</b>	1.18" x 1.77" x 0.11" (30 x 45 x 2.8 mm)	1.57" x 1.22" x 0.19" (40 x 31 x 4.8 mm)		1.77" x 1.18" x 0.06" (45 x 30 x 1.6 mm)		1.89" x 1.13" x 0.30" (47.9 x 28.6 x 7.5 mm)	1.95" x 1.30" x 0.26" (49.6 x 33.0 x 6.6 mm)	
<b>Housing Materials</b>	PA6	PC		Epoxy		PC		
<b>Colors</b>	Black, red, blue, green, yellow, gray, white, orange	Black, blue, red		Black		Transparent blue		
<b>WATER RESISTANCE</b>								
<b>Water</b>	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h	IP67, 68° F (20° C), 3.3 ft (1 m) x 1 h						
<b>Withstands Exposure To</b>	Acetic acid water, artificial perspiration, carbonated sodium water, ethylene glycol, fuel B, salt mist, salt water, sugared water							
<b>Environmental Test Conditions</b>	68° F (20° C), 100h							
<b>Drop Test</b>	6 ft (1.8 m), 10 x 10 cycles							
<b>THERMAL</b>								
<b>Storage</b>	-40° to +194° F (-40° to +90° C), 1000h	-13° to +176° F (-25° to +80° C), 1000h						
<b>Operating</b>	-13° to +158° F (-25° to +70° C)	-13° to +176° F (-25° to +80° C)						
<b>Shock/Fatigue</b>	-40° to +194° F (-40° to +90° C), 100x 5 min. with 30 sec. transition	-31° to +176° F (-35° to +80° C), 100x 5 min. with 20 sec. transition						
<b>Humidity Storage</b>	Storage at 140° F (60° C) for 100 h, humidity >90%							
<b>OTHER</b>								
<b>Standards</b>	ISO 10373, ISO 60529, ISO 14443	ISO 10373, ISO 60529	ISO 10373, ISO 60529; ISO 14443 (MIFARE), optional NFC	ISO 10373, ISO 60529	ISO 10373, ISO 60529, ISO 14443 (MIFARE), Trusted Tag, optional NFC	ISO 10373, ISO 60529		ISO 10373, ISO 60529, ISO 14443
<b>Print Options</b>	Single or both sides with various technologies							
<b>Warranty</b>	1 year							

**ASSA ABLOY**