SAMES KEY RING TAG

SA7110DKEY

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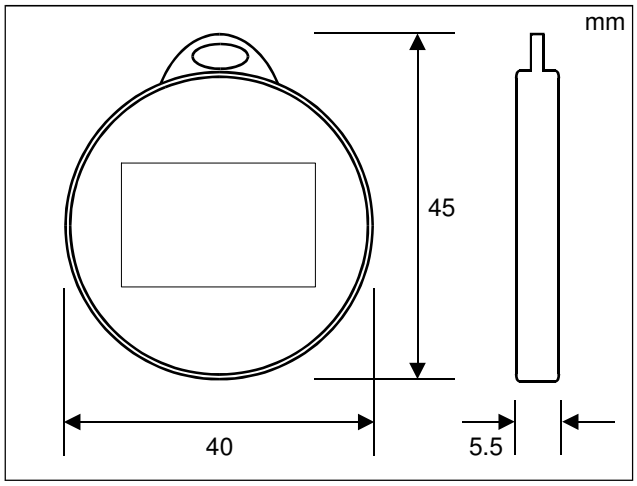
The SAMES key ring tag provides the secure and convenient link for access control, customer loyalty, personnel identification, etc. It includes the SAMES SA7110 IC and antenna circuit and has been packaged to withstand rough handling associated with key ring use.

The SAMES key ring tag is available as a read only version with a unique factory programmed identification code.



GENERAL SPECIFICATION

Function	Passive read-only radio frequency identification tag
Memory size	64 bit Read Only Memory
Serialization	40 bit serial number
Typical operating frequency	125 kHz
Modulation / Encoding	Amplitude Shift Keying (ASK) / Manchester
Read Speed	1953 bits/second (32.8ms read time typically)
Power source	Powered from the reader signal
Operating Temperature	-40 to +70°C
Storage Temperature:	-40 to + 70°C
Case Material	Plastic ABS
Protection Class	TBA
Colour	Black

MEMORY ARRAY

The SA7110 IC used in the key ring tag contains 64 bits divided in to five groups of information. 9 bits are used for the header, 10 row parity bits (P0-P9), 4 column parity bits (PC0-PC3), 40 data bits (D00-D93) and 1 stop bit set to logic 0.

The header is composed of the 9 bits which are all programmed to “1”. The header is followed by 10 groups of 4 data bits and 1 row parity bit. The 10 groups of 4 data bits allow for 100 billion combinations. The last group consists of 4 column parity bits with 1 stop bit which is programmed to “0”.

Bits D00 to D03 and bits D10 to D13 are customer specific identification.

The 64 bits are outputted serially in order to control the modulator. The output sequence is repeated continuously as long as the tag is in the reader RF field.

1	1	1	1	1	1	1	1	1	9 header bits
8 version bits or customer ID				D00	D01	D02	D03	P0	
				D10	D11	D12	D13	P1	
32 data bits				D20	D21	D22	D23	P2	
				D30	D31	D32	D33	P3	
				D40	D41	D42	D43	P4	
				D50	D51	D52	D53	P5	
				D60	D61	D62	D63	P6	
				D70	D71	D72	D73	P7	
				D80	D81	D82	D83	P8	10 line parity bits
				D90	D91	D92	D93	P9	
4 column parity bits				PC0	PC1	PC2	PC3	S0	Stop bit

DISCLAIMER:

Any sales or technical questions may be posted to our e-mail address below:
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For the latest updates on datasheets, please visit our web site:
http://www.sames.co.za.

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