TM   TM

	TM	TM
	23.00/	
	:DALLAS :DS1991L-F5 :	
	111 2-18	
	010-89556143 13651001171	

DALLAS   DS1991L-F5
                                                          DS1991L-F5
2.8V 6V   -40 +80
         ,   %

    tm   ,   .   ibuton

                                        1l

status

part number	status	replacement	explanation
ds1991	this product is not recommended for new designs. some versions may be no longer available or being discontinued and subject to last time buy, after which new orders can not be placed.see ordering information for details.	ds1977	ds1991 is only available under allocation due to end of life program. recommended alternatives will require software/firmware updates to existing systems.

description	data sheet
the ds1991 multikeyibutton® is a rugged read/write data carrier that acts as	full data sheet

three separate electronic keys, offering 1,152 bits of secure, nonvolatile memory. each key is 384 bits long with distinct 64-bit password and public id fields (figure 1). the password field must be matched in order to access the secure memory. data is transferred serially via the 1-wire® protocol, which requires only a single data lead and a ground return. the 512-bit scratchpad serves to ensure integrity of data transfers to secure memory. data should first be written to the scratchpad where it can be read back. after the data has been verified, a copy scratchpad command will transfer the data to the secure memory. this process ensures data integrity when modifying the memory. a 48-bit serial number is factory lasered into each ds1991 to provide a guaranteed unique identity which allows for absolute traceability. the family code for the ds1991 is 02h. the durable microcan package is highly resistant to environmental hazards such as dirt, moisture and shock. its compact button-shaped profile is self-aligning with mating receptacles, allowing the ds1991 to be easily used by human operators. accessories permit the ds1991 to be mounted on plastic key fobs, photo-id badges, printed-circuit boards or any smooth surface of an object. applications include secure access control, debit tokens, work-in-progress tracking, electronic travelers and proprietary data.

dow rev 2 (pdf, nload 744k b)	
e-mail	

this product contains lithium-metal batteries. see applicable regulations for transport requirements for batteries in equipment.

key features	applications/uses
1,152-bit secure read/write, nonvolatile memorysecure memory cannot be deciphered without matching 64-bit passwordmemory is partitioned into 3 blocks of 384 bits each64-bit password and id fields for each memory block512-bit scratchpad ensures data transfer integrityoperating temperature range: -40° c to +70° cover 10 years of data retentionunderwriters laboratories (ul) recognized	guarding sensitive financial or personnel filesprotecting intellectual property, such as licensed softwarerestricting access to buildings, cash drawers, or maintenance areas

diagram