**DALLAS SEMICONDUCTOR** **MAXIM**

www.maxim-ic.com

The iButton is the prefect credential for Identification, Access Control, and eCash applications. We have designed several iButton fobs that makes using iButtons extremely easy. However, for those who prefer using cards or badges we have developed a few solutions for you as well.

There are three approaches to making an iButton ID badge:

1) DS9606P—Adhesive Pads
2) DS9093RA—Lock Washer and DS9093RB Flange Enlargement
3) DS9101—Multipurpose Clip

Using the DS9606P Adhesive Pads

Attach one of the DS9096P adhesive pads to the iButton. Then peel away the protective paper on the other side of the pad and attach it to the ID badge. To ensure good adhesion, make sure the surface is clean before applying the adhesive pad to the iButton or badge.

DS9096P

15.2 DIA.

0.6

63.5
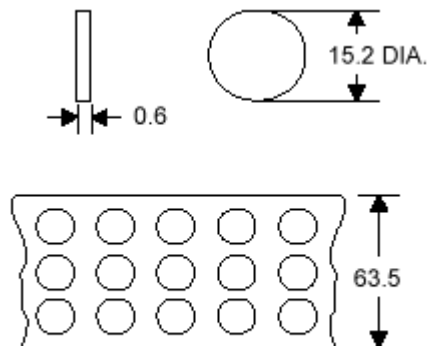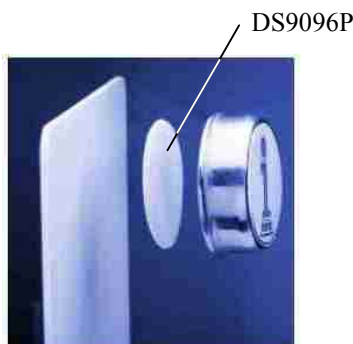
All dimensions are shown in millimeters.

Using the DS9093RA and DS9093RB or DS9101

For these options you first need to punch a hole in your card stock for the iButton to fit into. You will need to adhere to the following specifications for your card stock.

iButton is a registered trademark of Dallas Semiconductor.

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Card Stock Specifications

The card stock is identical to any standard badge except for the pre-punched hole for mounting the iButton. The standardized location for the button is near the top center edge of the card. The preferred material is a PCV/ polyester composite (TAC 1 or TAC 2), which resists cracking and warping at temperature extremes. The only additional requirement for this badge stock is that there must not be any burrs around the punched hole any higher than 0.004 inches. (Nonconformance can result in a damaged printer head.)
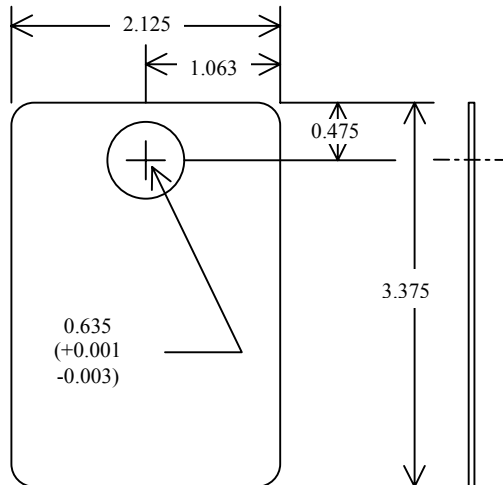
All dimensions shown in inches.

Most of the card printers available can print an iButton badge. The only additional consideration is that the card stock must be positioned in the hopper so that the end with the hole is away from the grabber mechanism.

Card Grabber
Mechanism Side

Back of Card
Hopper

Using the DS9093RA and DS9093RB

The DS9093RA lock ring is a stainless-steel fastener, which provides an inexpensive method for firmly attaching an iButton to any item with a pre-punched hole. The iButton is inserted through the hole and is restrained by the flange on the iButton. The DS9093RA lock ring is crimped onto the portion of the iButton that protrudes through the hole.

The optional DS9093RB Flange Enlargement is a thin stainless steel washer that provides additional surface area to improve retention of the iButton in materials that are very thin or flexible. The DS9093RB is formed with a slight dome to improve the gripping force exerted onto the pre-punched material. The domed side of the washer should face the flange of the iButton, the flat side should face the material.
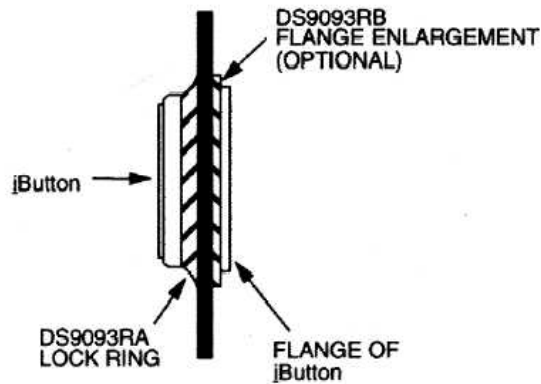

DS9093RA

19.05 mm
16.23 mm

0.30 mm

DS9093RB

19.05 mm
16.51 mm

0.51 mm
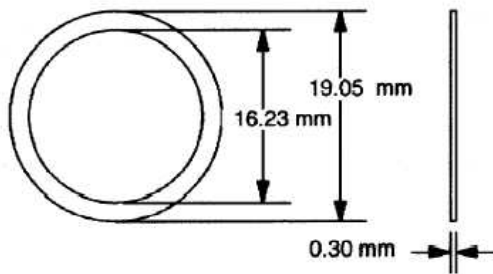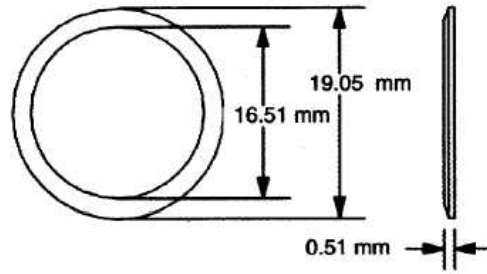
DS9093RA AND DS9093RB APPLICATION

DS9093RB
FLANGE ENLARGEMENT
(OPTIONAL)

iButton

DS9093RA
LOCK RING

FLANGE OF
iButton

Using the DS9101

The DS9101 multipurpose clip offers the user a low-cost fixture that mounts an iButton to a plastic badge. Once the card is printed, press the iButton into the card from the backside until the flange of the can is resting against the badge. Affix the DS9101 clip by simply holding the clip open slightly and sliding the clip over the iButton until it falls into place around the button.

The badge can then be worn with standard badge clip or lanyard.