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REPORT

on

COMPONENT - INFORMATION TECHNOLOGY EQUIPMENT, INCLUDING ELECTRICAL BUSINESS  
EQUIPMENT

Maxim Integrated Products  
Sunnyvale, CA

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## DESCRIPTION

## PRODUCT COVERED:

\* USR CNR - Component Lithium Battery Powered Integrated Circuit, Model DS1643#, DS1230ABP#, DS1230WP#, DS1230YP#, DS1245ABP#, DS1245WP#, DS1245YP#, DS1250ABP#, DS1250WP#, DS1250YP#, DS1330ABP#, DS1330WP#, DS1330YP#, DS1345ABP#, DS1345WP#, DS1345YP#, DS1350ABP#, DS1350WP#, DS1350YP#, DS1643P#, DS1644P#, DS1646#, DS1647P#, DS1486P#, DS1386P-8K#, DS1386-32K#, DS1742#, DS1743P#, and DS1743W#, where # may represent any **combination of symbols, letters, and/or numbers that describe non-safety related characteristics.**

\* USR CNR - Component Power Module, Model DS3800#, DS3802#, and DS9034#, where # may represent any **combination of symbols, letters, and/or numbers that describe non-safety related characteristics.**

## GENERAL DESCRIPTION (NOT FOR FIELD REPRESENTATIVE'S USE):

\* The components covered by this Report consist of an integrated circuit, one or two lithium batteries, and a printed wiring board. For models **DS3800#** and **DS3802#**, if integrated circuit lithium battery, model DS1254 is not provided, printed wiring board is also not provided. The entire assembly is provided with a separate enclosure and encapsulated with epoxy. For all models except **DS3800#** and **DS3802#**, the reverse charging protection to the lithium battery is provided by the integrated circuit. The integrated circuit has been separately evaluated and is considered to be a Recognized Component. **Models DS3800#** and **DS3802#** consist of two Recognized lithium batteries in parallel. The flammability characteristics of the combination of enclosure, encapsulant, and integrated circuit has been evaluated and found to be **V-0**.

USR, CNR - indicates investigation to the UL Standard for Safety of Information Technology Equipment, UL 60950-1 - STANDARD FOR SAFETY FOR INFORMATION TECHNOLOGY EQUIPMENT - SAFETY - PART 1: GENERAL REQUIREMENTS - Edition 1 - Revision Date 2007/10/31 and CSA C22.2 NO. 60950-1 (1ST ED.) - INFORMATION TECHNOLOGY EQUIPMENT SAFETY PART 1: GENERAL REQUIREMENTS - Edition 1 - Revision Date 2006/07/07

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in products where the suitability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability - The following items are to be considered when evaluating these devices in the end-use product.

1. This device is intended for use as components in low voltage secondary circuits (SEC).

2. These devices are considered to meet the requirements for 94V-0 flammable material. They have been evaluated to Appendix A6 of UL 1950. Test conducted per Appendix A6 of UL 1950 is equivalent to Annex A2 of 60950-1.

3. If these devices are replaced, the replacement is to be done by a trained technician.

4. With exception to Models **DS3800#** and **DS3802#** when DS1254 module is not provided, these devices are provided with the applicable reverse charging current protection. This protection is provided by the integrated circuit, which is part of the device and encapsulated with the battery.

5. Consideration should be given to Sub-clause 1.7.15 of 60950-1, first edition.

6.

7. **Models DS3800#** and **DS3802#** only: Reverse charging current protection is provided as part of the chip when the module is provided with lithium battery integrated circuit model DS1254, otherwise it consists of only two lithium batteries in parallel. When DS1254 is not provided the two poles of this device are connected to the batteries the pin next to the square notch in the molded enclosure and the pin diagonal to it. The maximum abnormal charging current is 5.0mA. This module is not rechargeable. If the module is not provided with model DS1254, the circuit containing the cells or batteries must be provided with protective components as noted in CL 4.3.8.

#### MODEL DIFFERENCES

Model DS9034 is the only model that utilizes the housing.

Only those models that end with "W", "P", "WP" or "YP" before the "#" sign are considered bases.

All other models not covered above do not **possess** a base or a housing.