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CCS L40



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 48163.8-2026

**Semiconductor devices - Semiconductor devices for energy harvesting
and generation - Part 8: Test and evaluation methods of flexible and
stretchable supercapacitors for use in low power electronics**

半导体器件 能量收集和产生半导体器件 第8部分：低功耗电子产品中柔性和可拉
伸超级电容器的测试和评估方法

(English Translation)

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Foreword

GB/T 48163.8-2026 is a recommended national standard (GB/T) of the People's Republic of China, issued on 28 September 2026 by the State Administration for Market Regulation and the Standardization Administration of China, with effect from 1 April 2027.

The document adopts an international standard (ISO or IEC).

It is under the responsibility of the Ministry of Industry and Information Technology (Electronics).

Classification: ICS 31.080.99; CCS L40.

1 Scope

This document is a test and evaluation method for flexible and stretchable supercapacitors intended for low power electronics. It is Part 8 of a series on semiconductor devices for energy harvesting and generation, and it addresses a device type that is relevant to wearables, sensors, and other small electronic products that need compact energy storage able to bend or stretch.

Users include supercapacitor and materials manufacturers, independent test laboratories, researchers, and product developers who want results measured and reported on a common basis. As a recommended national standard (GB/T), it is voluntary unless a customer or contract requires it. It adopts an international standard.

Comparable results across laboratories and suppliers are the practical benefit of working from such a shared method, and it gives buyers a way to read supplier claims about bending or stretching performance. It takes effect on 1 April 2027.