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

GB/T 48163.3-2026

**Semiconductor devices - Semiconductor devices for energy
harvesting and generation - Part 3: Vibration based
electromagnetic energy harvesting**

半导体器件 能量收集和产生半导体器件 第3部分：基于振动的电磁能量收集器
(English Translation)

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Foreword

GB/T 48163.3-2026 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).

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1 Scope

This part of the series on semiconductor devices for energy harvesting and generation covers vibration based electromagnetic energy harvesting. Devices of this type turn mechanical vibration into electrical power, and they are considered for powering industrial monitoring nodes, transport sensors and other small autonomous electronics. The standard adopts an international standard.

The document is aimed at harvester manufacturers, electronics designers, researchers, and laboratories that need agreed ways of describing and evaluating such devices. Where a coil and magnet arrangement responds to ambient vibration, comparable descriptions make it easier to choose a harvester for a given machine or vehicle.

It forms part of a series, and therefore is best used together with the other parts. It is a recommended national standard (GB/T). Engineers working on battery-free sensing products for Chinese customers, or comparing domestic requirements with international practice, may find it a useful reference. It becomes effective on 1 April 2027.