

Article Overview

Key manufacturers of high and low voltage semiconductor equipment include Electronic Devices Inc. for rectifiers and diodes, and global semiconductor equipment leaders like ASML, Applied Materials, and SCREEN Semiconductor Solutions.

High and Low Voltage Device Manufacturers

Electronic Devices Inc. (EDI) specializes in a broad range of high and low voltage rectifiers, fast recovery diodes, and complete assemblies. Their products cover voltages up to 250,000 volts and currents up to 25 amperes, with options for single-phase and three-phase bridges, ultra-fast recovery devices, and custom-designed assemblies. EDI also offers axial lead diodes ranging from 50 volts to 30,000 volts, ultra-low leakage diodes, and specialized devices for night vision and other high-reliability applications. They provide both catalog and fully custom solutions to meet specific industrial requirements .

Semiconductor Equipment Manufacturers

For chip fabrication and processing, several global companies provide complete semiconductor equipment for both logic and power devices:

- o ASML (Netherlands): Leader in lithography systems, including EUV and DUV tools essential for advanced nodes below 7nm, supporting high-performance chips for AI, HPC, and mobile devices .
- o Applied Materials (USA): Supplies deposition, etching, CMP, inspection, and advanced packaging equipment, serving both memory and logic segments .
- o SCREEN Semiconductor Solutions (Japan): Specializes in wafer cleaning, wet processing, and front-end tools critical for DRAM, 3D NAND, FinFET, and GAA architectures .
- o Plasma-Therm (USA): Offers plasma etch, deposition, and thermal processing systems for advanced packaging and semiconductor devices .
- o SPTS Technologies (UK): Provides plasma etch and deposition solutions for MEMS, photonics, power devices, and RF applications .
- o Gigaphoton (Japan): Supplies excimer laser light sources for lithography, crucial for precision chip manufacturing . These companies collectively cover the entire semiconductor manufacturing value chain, from wafer preparation and etching to lithography and packaging, enabling both high-voltage and low-voltage chip production.

Summary

For high and low voltage semiconductor components, Electronic Devices Inc. is a leading manufacturer



High and Low Voltage Complete Equipment Chip Manufacturers

offering a wide range of rectifiers, diodes, and assemblies. For complete semiconductor fabrication equipment, global leaders like ASML, Applied Materials, SCREEN Semiconductor Solutions, Plasma-Therm, SPTS Technologies, and Gigaphoton provide the tools necessary for producing advanced chips across logic, memory, analog, and power segments . These manufacturers are essential for both industrial and high-performance electronics applications.

HV TECHNOLOGIES provides a complete and broad range of High Voltage Test Equipment and Service

The Complete Series of products is tailored for modern power systems, featuring High Voltage Switchgear, Low Voltage Switchgear,

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High and Low Voltage Complete Equipment Supplier, ring Main Cabinet Switchgear, Outdoor Control Panel Manufacturers/ Suppliers

We have the largest ASML manufacturing site in Asia as well as two training centers, play an essential role in the rapidly growing e

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Microchip Technology is a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions that also offers



High and Low Voltage Complete Equipment Chip Manufacturers

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22 High Voltage Resistor Manufacturers in 2026 This section provides an overview for high voltage resistors as well as their

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