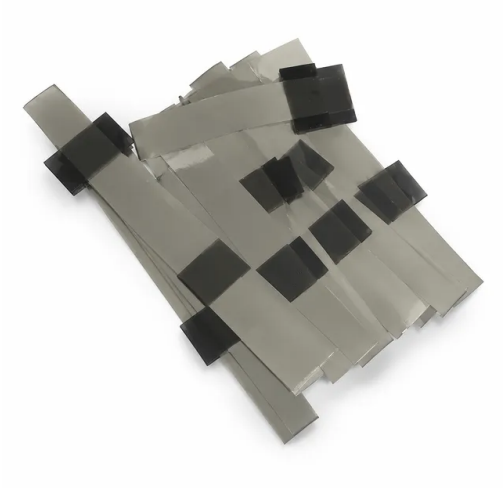
Customizable 3Mm Aluminum Tabs For Pouch Cell Battery Fabrication And Research

Item Number: FZ34



Introduction

Source high-purity 99.99% 3mm aluminum tabs engineered for pouch cell battery fabrication and electrochemical research. Featuring customizable dimensions, superior ultrasonic weldability, low contact resistance, and dependable 3A current rating for laboratory cell prototyping.

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Application	Description	Key Benefit
Lithium-ion Pouch Cell R&D	Positive terminal integration for custom pouch cells utilizing NMC, LCO, or LFP cathode chemistries.	Ensures ultra-low internal resistance and high-integrity ultrasonic bonding to cathode current collector foils.
Solid-State Battery Assembly	Current lead termination for prototype all-solid-state and hybrid polymer electrolyte pouch cells.	Delivers stable interfacial contact under high stack pressures without risk of tab deformation or fracture.
High-Rate Discharge Characterization	Continuous and pulsed discharge testing of experimental miniature pouch cells up to 3A operating currents.	Prevents excessive resistive thermal spikes at tab joints, preserving accurate cell temperature telemetry.
Battery Material Synthesis Validation	Electrical lead connection for testing newly synthesized cathode active materials in full-cell configurations.	High 99.99% purity prevents extraneous metallic contamination from skewing electrochemical cycling results.
Electrochemical Impedance Spectroscopy (EIS)	Low-noise electrical connection for precision high-frequency AC impedance and internal resistance measurements.	Minimizes fixture and lead parasitic impedance to provide pristine Nyquist plot data across wide frequency bands.
Supercapacitor and Hybrid Device Prototyping	Terminal feedthroughs for high-surface-area carbon and pseudocapacitive pouch-type energy storage units.	Supports rapid charge-discharge kinetics with minimal voltage drop across the hermetic cell boundary.
Academic Teaching and Laboratory Training	Practical cell fabrication training in university cleanrooms and battery engineering coursework.	Standardized dimensional profile reduces operator assembly error during manual alignment and heat sealing.

Parameter	Specification (FZ34)
Product Item Number	FZ34
Primary Material	Aluminum (Al)
Material Purity	≥ 99.99%
Tab Length	48 mm
Tab Width	3 mm
Tab Thickness	0.09 mm
Maximum Continuous Carrying Current	3 A
Net Weight	46 mg/pcs
Surface Condition	Smooth, Bur-Free, Degreased
Compatibility	Ultrasonic Metal Welding, Laser Tab Welding
Electrolyte Resistance	Compatible with standard Li-ion carbonate solvents (EC, DMC, EMC)

Parameter	Specification (FZ34)
Customization Options	Custom length, width, thickness, and pre-applied sealant film upon request