

Mini Solder Sleeve Discrete Wire Terminals 微型焊锡分立导线端子

一步式密封连接 One-Step Sealing

SD 系列专为解决导线与硬质插针、接线柱或插片之间的连接难题而设计。它采用一体化结构，将定量焊锡环、助焊剂及含胶热缩管完美融合。无需复杂的辅助工具，仅需一次加热，即可同步完成焊锡连接、绝缘封装与防水密封。该方案不仅消除了手工焊接的虚焊风险，更利用热缩管壁提供了强大的抗震抗拉保护，特别适用于汽车连接器、电机引线及继电器触点的高密度布线与自动化批量生产。

The SD Series streamlines the termination of discrete wires to pins, posts, and tabs. Featuring an all-in-one design, it integrates a precise solder preform, flux, and an adhesive-lined heat-shrink sleeve. A single heating step creates a fully soldered, sealed, and insulated connection, eliminating the variability of manual soldering. The shrunk sleeve provides mechanical reinforcement to protect against vibration and pull-out. Ideal for high-density applications in automotive connectors, motor leads, and relay terminals.

系列概览

- SD125B: 适用于 125 °C 以下且要求锡环满足环保要求标准的应用; 提供标准级密封, 适用于大多数电子线束及插针/插片连接。
- SD125C: 适用于 125 °C 以下且无锡环满足环保要求的应用; 为常规的“导线-插针/接线柱/插片”连接提供标准密封性能。
- SD150A: 适用于高达 150 °C 的高温环境; 为苛刻或高温应用提供稳健的密封与焊接性能。

Series Overview

- SD125B: For applications up to 125 °C requiring the solder rings meet environmental protection requirements compliance; provides standard sealing and is suitable for most electronic harnesses and pin/tab connections.
- SD125C: For applications up to 125 °C where the solder rings environmental protection requirements is not required; standard sealing performance for general wire-to-pin/post/tab joints.
- SD150A: For high-temperature environments up to 150 °C; delivers robust sealing and soldering for demanding or elevated-temperature applications.

备注:

- 选型建议: 请依据实际工况的连续工作温度及环保要求锁定对应系列。具体规格与料号请查阅表 A-D。
- 定制服务: 支持特殊规格定制, 欢迎联系技术团队咨询。
- 免责与MOQ: 规格参数如有更新恕不另行通知; 实际起订量 (MOQ) 可能与标准包装数量有所差异, 请以报价单为准。

Notes:

- Selection: Choose the appropriate series based on your continuous operating temperature and compliance requirements. See Tables A-D for dimensions and part numbers.
- Customization: Custom specifications are available upon request. Please contact our technical support.
- Terms: Specifications are subject to change without notice. Minimum Order Quantities (MOQ) may vary from standard package sizes.



特性与优势 Features and benefits

- **一步三效:** 单次加热即可同步完成焊接、绝缘与密封, 无需额外工序。
- **全透视:** 高透明套管设计, 支持无损目视质检, 焊接质量一目了然。
- **杜绝虚焊:** 定量焊锡环配合标准化加热流程, 确保批量生产的一致性。
- **宽温防护:** 覆盖 -55°C 至 150°C 温区 (视系列而定), 提供持久的防潮、防腐与电气稳定性。
- **3-in-1 Efficiency:** Solders, insulates, and seals in a single, streamlined operation.
- **Visual Inspection:** Transparent sleeve enables immediate, non-destructive verification of the joint quality.
- **Process Consistency:** Controlled solder preforms ensure repeatable integrity, eliminating cold joints.
- **Wide-Temp Reliability:** Delivers long-term moisture and corrosion protection across -55°C to 150°C (depending on series).

颜色 COLOR



表 A. 产品选项
Table A. Product Options

产品系列 Product Series	最高工作温度 Max. Operating Temperature	适用导线最低耐温等级 Min. Wire Temperature Rating
SD125B, SD125C	125°C [257°F]	85°C [185°F]
SD150A	150°C [302°F]	125°C [257°F]

注：针对 125°C [257°F] 的工作温度，可提供无镉选项。详情请咨询鼎元 (DINGYUAN)。

Note: Cadmium-free option is available for operating temperature of 125°C [257°F]. Consult DINGYUAN for details.

表 B. SD125B 系列
Table B. SD125B Series

连接点类型与尺寸 Connection-point Type and Size	端子尺寸 Terminal Dimensions	适用线规 Wire AWG/mm ²	产品编号 Part No.
Pin	W=up to 0.63 [.025]	24 [0.24]	SD125B-01
		20[0.61]	SD125B-02
	W=0.63 [.025] to 0.89 [.035]	24 [0.24]	SD125B-01
		22[0.38]	SD125B-02
Post	W=0.89 [.035] to 1.14 [.045]	20[0.61]	SD125B-03
		24-22 [0.24-0.38]	SD125B-02
	W=1.14 [.045] to 1.52 [.060]	20-18 [0.61-0.95]	SD125B-03
		24-22 [0.24-0.38]	SD125B-03
Tab	W = up to 1.52 [.060]	20-18 [0.61-0.95]	SD125B-04
	W=1.27 [.050] to 2.28 [.090]	24-20 [0.24-0.61]	SD125B-01
	W=1.77 [.070] to 2.79 [.110]	24-18 [0.24-0.95]	SD125B-02
	W=2.54 [.100] to 3.80 [.150]	24-18 [0.24-0.95]	SD125B-03
	W=2.28 [.090] to 4.70 [.187]	24-18 [0.24-0.95]	SD125B-04
		22-16 [0.38-1.21]	SD125B-05

表 C. SD150A 系列
Table C. SD150A Series

连接点类型与尺寸 Connection-point Type and Size	端子尺寸 Terminal Dimensions	适用线规 Wire		载带套管间距 (中心距) Tape Carrier Spacing of Sleeves (Center-to-Center)				
		AWG	mm ²	None	1.27 [0.050]	2.54 [0.100]	3.17 [0.125]	4.0 [0.156]
Pin	W= up to 0.61 [.024]	30-26	[0.05-0.15]	SD-150A-4130	SD-150A-1303	--	--	--
		24-22	[0.24-0.38]	SD-150A-4107	--	SD150A-1100	--	--
Post	W=0.63 [.025] to 0.81 [.032]	20	[0.61]	SD-150A-4131	--	SD150A-1104	SD150A-1107	SD150A-1108
		24-20	[0.24-0.61]	SD-150A-4156	--	--	--	--
		24-20	[0.24-0.61]	SD-150A-2905	--	SD150A-1401	--	--
Tab	W=1.27 [.050] to 2.28 [.090]	24-20	[0.24-0.61]	SD-150A-2903	--	--	--	SD150A-1400
		24-20	[0.24-0.61]	SD-150A-2943	--	--	--	--

表 D.微细导线连接
Table D. For Fine Wire Terminations
0.15mm² (26 AWG) and Smaller

产品编号 Part No.	供货内径 Inside Diameter As Supplied**	完全回缩后内径 Fully Recovered †	长度 Length ††
SD150A-063	1.0 [0.040]	0.6 [0.025]	16.0[0.630]
SD150A-217	1.0 [0.040]	0.6 [0.025]	9.0[0.360]
SD150A-4113	0.75 × 1.65[0.030 × 0.065]	0.75 [0.030]	4.7[0.185]
SD150A-4122	0.75 × 1.65[0.030 × 0.065]	0.75 [0.030]	6.0[0.240]
SD150A-4130	0.75 × 1.65[0.030 × 0.065]	0.75 [0.030]	9.5[0.375]

注:SD 系列专门用于将 26AWG (0.15 mm²) 以下的细导线连接至宽度小于 0.6 mm [0.025英寸] 的端子上。

* SD150A-063 和 SD150A-217 主要用于单根导线的端接,且没有挡线点(Wire stop)。而 SD150A-41XX 系列可容纳一根或两根导线;该部件内置有挡线点,可将导线定位在距离端子底部约 0.76 mm [0.03英寸] 的位置。

** 最小值。导线绝缘层外径必须小于此数值。当使用 SD150A-41XX 系列进行双线端接时,两根导线绝缘外径之和必须小于 1.5 mm [0.060英寸]。

† 最大值。导体直径 + 端子宽度 + 导线绝缘层厚度的组合尺寸必须大于此数值(以确保热缩管能紧密包裹)。

†† 端子长度应比此数值至少短 1.2 mm [0.05英寸]。必须调整导线的剥皮长度,以确保在端接完成后,裸露的导体部分完全被套管覆盖。

Note: SD series are used for attaching leads smaller than 26AWG (0.15 mm²) to terminals less than 0.6 [0.025] wide.

*The SD150A-063 and SD150A-217 are primarily for single wire termination and do not have a wire stop. The SD150A-41XX series will accept either one or two wires;the parts have a built-in wire stop that will locate the wire approximately 0.76[0.03] from bottom of terminal.

**Minimum. Wire insulation must be smaller than this. When using the SD150A-41XX parts for two-wire terminations, the combined wire insulation diameters must be less than 1.5[0.060].

†Maximum. The combination of conductor diameter and terminal width and the wire insulation must be greater than this.

††The terminal length should be at least 1.2[0.05] shorter than this.The wire strip length must be adjusted so that, when terminated, the exposed conductor is covered by the sleeves.

产品特性 Product Characteristics

材料规格 Material	
绝缘层 (SD150A) Insulation (SD150A)	辐照交联热缩聚偏氟乙烯 Radiation-crosslinked, heat-shrinkable polyvinylidene fluoride
绝缘层 (SD125B, SD125C) Insulation (SD125B, SD125C)	辐照交联热缩聚烯烃 Radiation-crosslinked, heat-shrinkable polyolefin
焊料(SD150A) Solder (SD150A)	焊料: Sn63 Pb37 Solder: Sn63 Pb37
焊料(SD125B) Solder (SD125B)	焊料: Sn42 Bi58 Solder: Sn42 Bi58
焊料(SD125C) Solder (SD125C)	焊料: Sn50 Pb32 Cd18 Solder: Sn50 Pb32 Cd18
典型性能 Typical Performance	
电压降 Voltage drop	2.0mv
抗张强度 Tensile strength	超过导线本体强度 Exceeds strength of conductor
介电强度 Dielectric strength	2.0kv
额定温度 (SD125B, SD125C) Temperature rating (SD125B, SD125C)	-55°Cto +125°C [-67°Fto 257°F]
额定温度 (SD150A) Temperature rating (SD150A)	-55°Cto +150°C [-67°F to 302°F]
绝缘电阻 Insulation resistance	1000 MΩ