Hiner-pack® MCS-PFA Cassette 100 mm

Designed for Wafer Handling in Corrosive or High-Temperature Semiconductor Processes

Engineered for extreme semiconductor manufacturing conditions, PFA wafer cassettes excel in wafer transfer, storage, and wet process cleaning. Constructed from premium perfluoroalkoxy (PFA) or Teflon resin, they offer exceptional resistance to strong acids, hydrofluoric acid, and caustic chemicals, maintaining structural integrity at continuous operating temperatures up to 220 °C. The cassette's smooth, translucent finish minimizes particle release, simplifies cleaning, and ensures wafer protection throughout processing. Designed to integrate with wafer etchers, wet benches, and SMIF/FOUP-compatible tools, these corrosion-resistant wafer carriers provide reliable, contamination-free handling for high-purity wafer cleaning, etching, and thermal applications in leading semiconductor fabs.

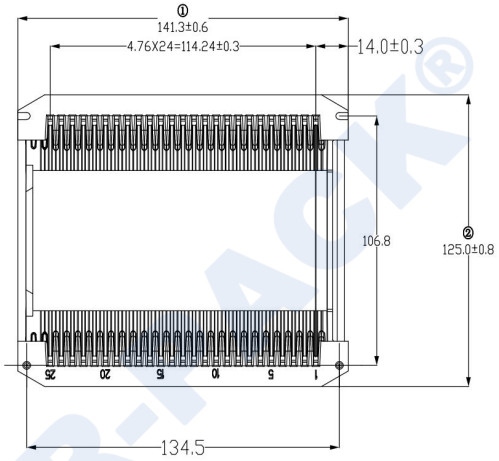
SPECIFICATIONS

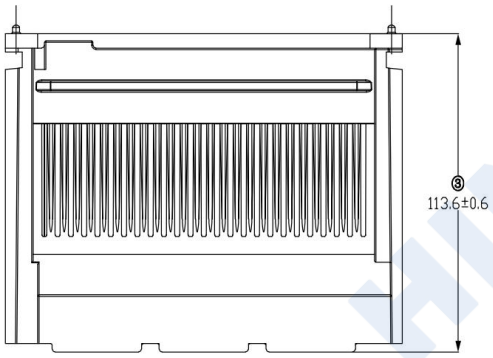
- 141.3 mm L × 125 mm W × 113.6 mm H (5.56" × 4.92" × 4.47")
- Maximum load capacity is 25 pieces

FEATURES & BENEFITS

- Inert PFA/Teflon resists strong acid/base and HF corrosion
- Withstands temperatures up to approximately 220 °C without degradation or deformation
- Smooth/translucent surface simplifies cleaning
- Supports customization (handles, laser engraving, RFID)

DIMENSION

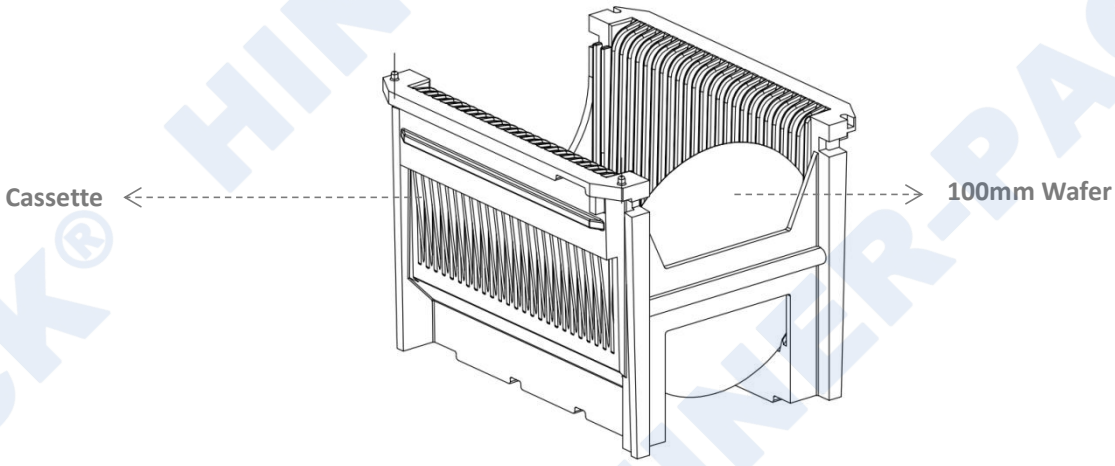




BASIC INFORMATION

Part Number	Material	Wafer Size
MCS-4/25-NP-PFA	PFA	100 mm

REFERENCE ILLUSTRATION



The above illustration is for reference only. Please refer to the actual product for accuracy.

TECHNICAL DATA

PROPERTY	TEST METHOD	RATED VALUES
Specific Gravity	ASTM D-792	2.12~2.17
Water Absorption	ASTM D-570 (24h, 1/3" thick)	<0.01%
Molding Shrinkage	--	0.04 cm/cm
Contact Angle	Angle with Horizontal Surface	115°
Thermal Conductivity	ASTM C-177	--
Coefficient of Linear Thermal Expansion	ASTM D-696 (23~60°C)	$12x10^{-5}$ /°C
Melting Point	--	302~310 °C
Melt Viscosity	--	10^4~10^5 /°C (380°C)
Maximum Continuous Use Temperature	--	380°C
Tensile Strength	ASTM D-638 (23°C)	27~31 MPa
Elongation	ASTM D-638 (23°C)	280~300 %
Compressive Strength	ASTM D-695 (1%deformation, 25°C)	5~6 MPa
Tensile Resilience	ASTM D-638 (23°C)	--
Flexural Resilience	ASTM D-790 (23°C)	647~686 MPa
Impact Strength	ASTM D-256 (23°C, Izod)	--
Hardness	Durometer	D60 shore
Bearing Deformation	ASTM D-621 (100°C, 7MPa, 24h)	2.4 %
	ASTM D-621 (23°C, 14MPa, 24h)	2.7 %
Static Friction Coefficient	Against Steel	0.05

The information on technical data included in this document is based on our experience to date, and we believe it to be reliable. Data is obtained from specimens molded under controlled conditions from representative samples of the compound described. Properties may be affected by the molding techniques and by the size and shape of the item molded. We cannot guarantee favorable results and no assurances can be implied that all molded articles have the sample properties as those listed.

Hiner-pack®

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