**ONE-STOP SUPPLIER OF SEMICONDUCTOR CARRIER PRODUCTS** 

# Hiner-pack® MCS-PFA Cassette 200 mm

Built to withstand chemical exposure in advanced wafer cleaning processes

PFA wafer cassettes are designed for the safe transfer, storage, and cleaning of semiconductor wafers in corrosive chemical environments and high-temperature wet process applications. Manufactured from premium perfluoroalkoxy (PFA) or Teflon resin, these wafer carriers provide exceptional resistance to strong acids, hydrofluoric acid, alkaline solutions, and continuous exposure to temperatures up to 220 °C without deformation, degradation, or ionic contamination. The smooth, translucent surfaces minimize particle generation, simplify cleaning, and maintain wafer integrity throughout critical manufacturing steps. PFA wafer cassettes are compatible with standard wafer processing tools, wet benches, and SMIF/FOUP interface systems, enabling direct transfer between acid baths, wafer etchers, and inspection equipment. Their outstanding chemical resistance, dimensional stability, and ultra-clean design make them ideal for wafer cleaning, etching, and high-temperature processing in advanced semiconductor fabs.



## **SPECIFICATIONS**

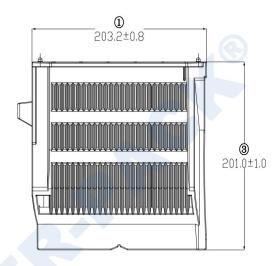
- 233.4 mm L  $\times$  203.2 mm W  $\times$  201 mm H (9.19"  $\times$  8"  $\times$  7.91") (The above dimensions do not include the alignment pins and handle.)
- Maximum load capacity is 25 pieces

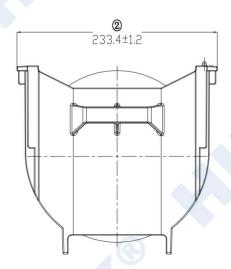
#### **FEATURES & BENEFITS**

- 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**





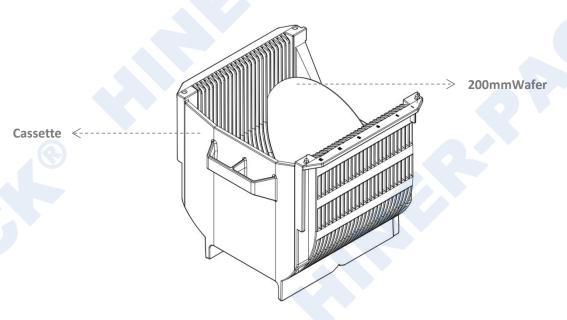


# **BASIC INFORMATION**

Part Number	Material		Wafer Size
MCS-8/25-NP-PFA	PFA		200 mm

# **REFERENCE ILLUSTRATION**





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

## **TECHNICAL DATA**

ROPERTY 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 <sup>-5</sup> /°C		
Melting Point		302~310 °C		
Melt Viscosity		10 <sup>4</sup> ~10 <sup>5</sup> /°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.



## **Corporate Headquarters**

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## **Customer Service**

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 $\label{eq:hiner-pack} \mbox{Hiner-pack$^{\otimes}$ is a registered trademark of Shenzhen Hiner Technology Co., Ltd.}$ 

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