

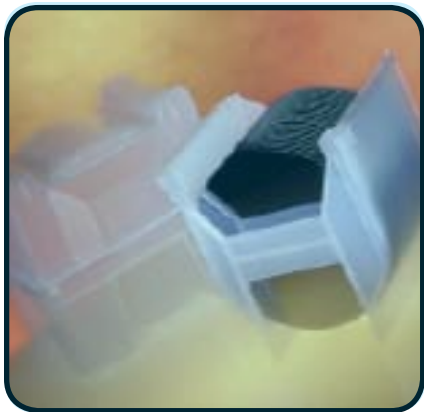
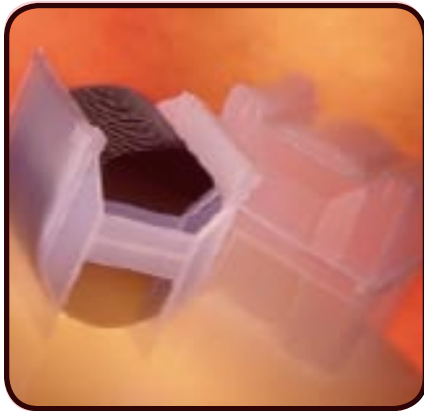
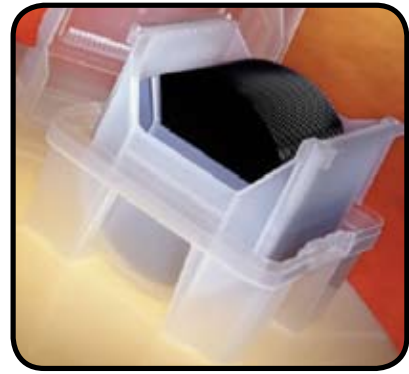


**PEAK**  
ELEVATING INNOVATION

## ULTRACARE™ 200/150MM VERTICAL WAFER SHIPPER

- Maximum Protection
- Highest Cleanliness
- Lowest Total Cost of Ownership

## SPECIFICATION SHEET WAFER SHIPPER



For 20 years Peak International Limited has served the world's largest, most demanding semiconductor companies with innovative, high-quality, and cost-effective JEDEC tray, tape and reel solutions. This unique combination of business value has now arrived in the first of many UltraCare™ wafer shipper products.

Peak's new 150mm and 200mm UltraCare Vertical Wafer Shipper provides for the highest possible levels of protection, cleanliness, low-cost and automation compatibility you expect from a global leader. The product's patent-pending raised ribbing and cross bar design strengthens the encasement while lowering the weight to save money in transport costs. The product has also been independently verified to offer the highest levels of cleanliness to protect you against wafer hazing, ionic, outgassing and other forms of contamination. And Peak's 150mm and 200mm UltraCare VWS provides for predictable robotic handling as well as highly accurate vertical and horizontal equipment interfacing. Did we mention Peak's solutions have been engineered to save you money? Peak is changing the nature of the wafer shipper business.

**Contact your local Peak representative for sampling and ordering information today.**

## FEATURES

- Kinematic coupling machine interface allows seamless equipment operability
- Design provides migration path from manual to automated wafer packaging/unpacking
- Large lot ID label area and removable RF tag option for maximum product identification and factory integration capabilities
- Patent Pending
- Low inorganics
- Low particle generation
- Low outgassing
- Long shelf life compared to conventional polypropylene
- SPI recycle code -5
- ESD safe for maximum wafer/device protection



**PEAK**  
ELEVATING INNOVATION

**SPECIFICATION SHEET  
WAFER SHIPPER**

**PHYSICAL SPECIFICATIONS**

Property	Test Method	Units	Typical Values
Specific Gravity	ASTM D - 792	g/cc	0.90
Tensile Strength	ASTM D - 638	MPa	32
Tensile Modulus	ASTM D - 638	MPa	460
Tensile Elongation	ASTM D - 638	percent	770
Flexural Modulus	ASTM D - 790	MPa	660
Notched Izod	ASTM D - 256	J/m	34
Unnotched Izod	ASTM D - 256	J/m	NB

\*amount of time required to dissipate 5000 volt charge to 500 volts

**Application:**

Wafer Carriers to protect work-in-process wafers during transport and handling.

**Minimum Order Quantity:**

30 Containers

**Type Lead Time:**

2-3 weeks for volume production

**Ion Concentration Limits\***

Fluoride (F):	<5
Chloride (Cl):	<62
Nitrate (NO <sub>2</sub> ):	<5
Calcium (Ca):	<1100
Sulfate (SO <sub>4</sub> ):	<280
Potassium (K):	<17
Phosphate (PO <sub>4</sub> ):	<5
Sodium (Na):	<12
Magnesium (Mg):	<230

**Organic Contamination Limits**

Outgassing: < 50 x 10<sup>-6</sup>g/g

**Specifications**

- Case Weight: 24 kg (52 lbs)
- Case Size: 32" x 21" x 19"
- Case Quantity: 12 assemblies
- Pallet Quantity: 6 cases (96 assem.)
- Container Quantity: 20 ft. or 40 ft.

\*values are measured in 10<sup>-9</sup>g/g

**Principal Office**

**Peak International Limited**  
Unit E & F, 19/F, CDW Building,  
388 Castle Peak Road,  
Tsuen Wan, NT, Hong Kong  
Tel: +852 3193 6000  
Fax: +852 2498 5382

**Sales Offices**

**United States**  
Central: (512) 795-2445  
Northern California: (831) 840-4623  
Southern California: (760) 238-6879

**Europe**  
+39 (06) 3987 0215

**Asia**  
+65 6846 2002