

Total Getter Solution

Overview

Since 1999, Johnson Matthey and the Hermetic Solutions Group have combined their advanced technology capabilities to offer getter solutions which support manufacturers of high reliability devices and systems.

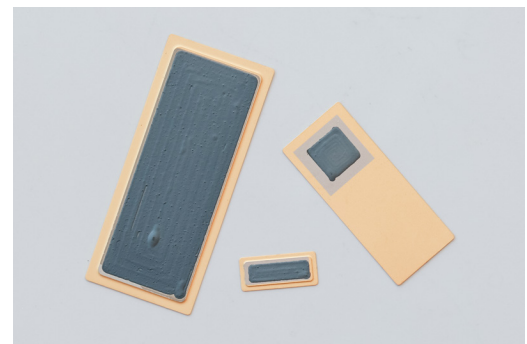


This unique offering enables a consistent and robust hermetic environment for sensitive microelectronics and prevents premature device failure. The Total Getter Solution, which consists of a Johnson Matthey Protelec getter material and a Hermetic Solutions Group lid, prevents build up of unwanted contaminants such as hydrogen, moisture and organics. These are either present in the device at the point of sealing or out-gas from plated surfaces and other components within the device after sealing. With extensive experience serving the aerospace, defense, telecom, petrochemical and medical device industries, we have a getter solution to address your every product application concern.

Technical Advantages

The use of getters within a hermetic device is a well-known solution to capture any contaminants present at sealing or which outgas during the life of the device. With proven reliability, getters provide a simple solution, often targeting a narrow range of contaminants. More novel applications of getters not only remove hydrogen but also CO₂, moisture and small organics that may be present. The Total Getter Solution range addresses hermeticity concerns by eliminating the following packaging contaminants:

- Moisture
- H₂
- CO₂
- O₂
- Organics



Hermetic Solutions Group and Johnson Matthey

Johnson Matthey, a leading specialty chemicals company, is underpinned by science, technology and its people. Drawing on nearly 200 years of material science and engineering expertise, across a multitude of industries, Protelec getters were developed to support a growing customer need. Manufactured in the UK, Protelec getters are available in nearly 20 formulations and configurations, addressing a plethora of product application requirements.

The Hermetic Solutions Group has established an enviable reputation throughout the microelectronics industry, supplying custom designed metal components and specialist materials for over 30 years. Rated by customers as a top performing supplier, Hermetic Solutions Group is valued not only for outstanding customer service, but also for detailed background knowledge of customer packaging requirements and assembly processes. With six manufacturing facilities and representatives strategically located throughout the world, the Hermetic Solutions Group is well positioned to support our customers' requirements.

Getter Options

	Tablet	Printed	Moisture	H ₂	CO ₂	O ₂	Organics	Description
HTA Series	X		X	X	X		X	Designed for harsh environment systems. Getters are effective up to 400°C. Can be supplied activated.
CP Series	X		X	X	X	X	X	Used in all applications. Getters absorb contaminants at normal operating temperatures. Will withstand processing and storage temperatures up to 500°C. Normally requires activation.
HGI Series		X	X	X	X		X	Smaller form factor than CP Series getters, but otherwise used in similar applications. Processing temperature is 120°C maximum. Very quick activation.
HTI Series		X	X	X	X			The same form factors and cost advantages of HGI series material (in comparison to CP Series), but can withstand processing temperatures up to 320°C.

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