

# Pad OCwype™

FOR QFN, DFN, AND OTHER PAD STYLE APPLICATIONS

## Improved Yields and Higher OEE for Package IC Testing

- Matches existing on-center load boards
- Self-cleaning wipe means less cleaning
- Extended vertical operating range
- New low-cost contactor technology

The new OCwype™ contactors are the latest in a long line of Johnstech products that allow companies to reduce costs and time to market.

Johnstech has long been recognized as the leader in both electrical and mechanical Contactor performance. OCwype™ contactors are aimed at mid-performance electrical devices that demand better mechanical performance than spring pin sockets can provide.

The OC stands for on-center. The “wype” refers to the self-cleaning wipe that Johnstech is known for.

## Engineering

Product and Test Engineers now have an on-center solution with:

- Low and very stable contact resistance
- High current carrying capacity

Low-cost OCwype™ contactors are designed to transfer seamlessly from engineering characterization to high volume production and fit on most existing on-center load boards.

## Production

Test Floor Managers now have an easy, cost effective way to improve their Overall Equipment Efficiency (OEE) and test throughput. OCwype™ contactors provide:

- Repeatable test results for higher yields and less retest
- Longer time between contactor cleanings
- Easy setup due to 0.4mm compliance
- Competitive pricing



And because OCwype™ contactors fit most existing spring pin load boards, the improved performance comes with minimal investment of time and money.

## Self-Cleaning Wipe

The self-cleaning wipe is the key to improved performance over existing spring pin sockets. Spring pins, which are a piercing technology, are prone to solder build-up on the tips, requiring frequent cleaning. OCwype™ contacts wipe on the pads during actuation, breaking through oxides and cleaning the contacts with each insertion.

Less cleaning keeps testers and handlers running longer between interruptions. That translates to more parts tested and ready for shipment at the end of the day and decreases the overall investment in capital equipment.

Self-Cleaning Wipe Top Contacts

QFN/DFN Pads With Matte Tin Plating	QFN/DFN Pads With NiPdAu Plating
	

\* Patent # US D711,836S



# Pad OCwype™

Electrical Performance	Pad OCwype™ for Matte Tin Packages	Pad OCwype™ for NiPdAu Packages
Insertion Loss (GSG)	-1 dB @ 6.3 GHz	-1 dB @ 7.6 GHz
Return Loss (GSG)	-20 dB @ 1.2 GHz	-20 dB @ 1.4 GHz
Crosstalk (GSSG)	-20 dB @ 5.6 GHz	-20 dB @ 22.3 GHz
Inductance	Self: 1.13 nH Mutual: 0.39 nH	Self: 1.1 nH Mutual: 0.42 nH
Capacitance	Ground: 0.35 pF Mutual: 0.32 pF	Ground: 0.48 pF Mutual: 0.40 pF
Current Carrying Capacity*	2.8 A, 4.5 A, 6.8 A, 7.9 A	2.8 A, 8.0 A, 10.4 A, 14.4 A
Average CRES	<50 mOhms	< 50 mOhms
Current Leakage	<1 pA @ 10V	<1 pA @ 10V
Nearest Decoupling Area	3.75 mm	3.75 mm

Specifications are typical values for 0.5mm pitch matte tin configuration and based on a combination of internal, third party test house and customer data. All specifications are subject to periodic updates. Third-party measured electrical data is the result of probing the top and bottom of contacts only (load board and device not included).

\* 20C temperature rise. Duty cycle 100%, 50%, 10%, 1%.

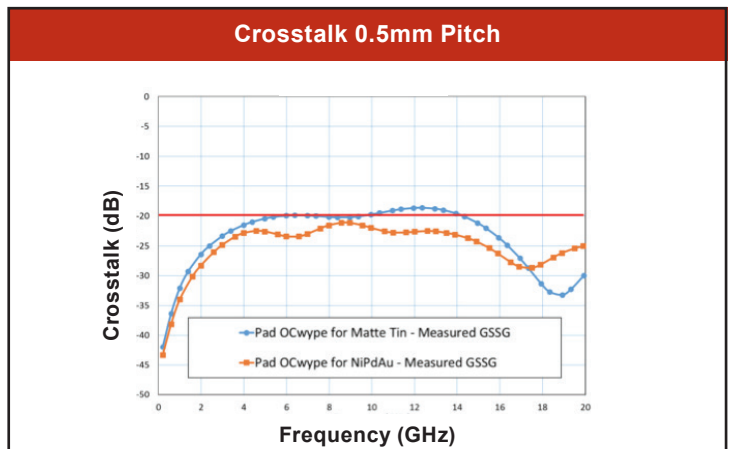
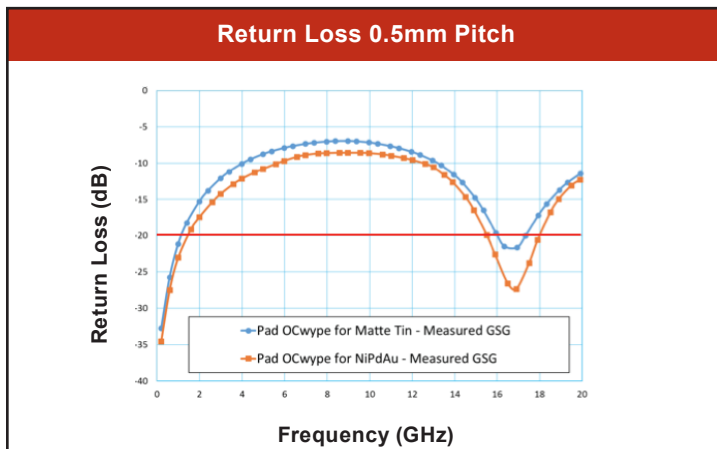
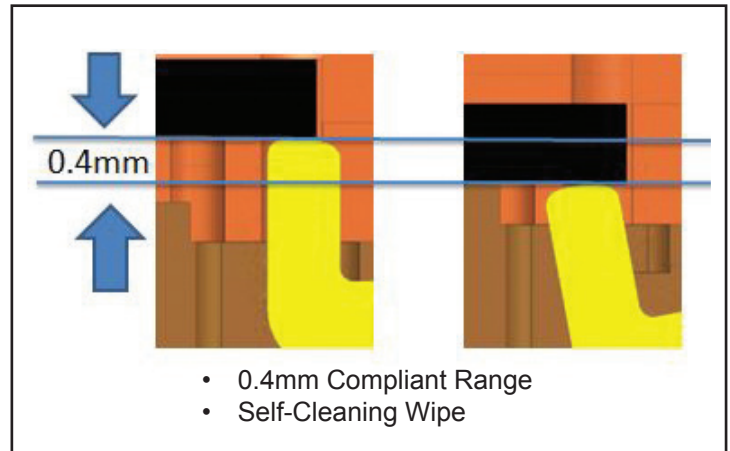
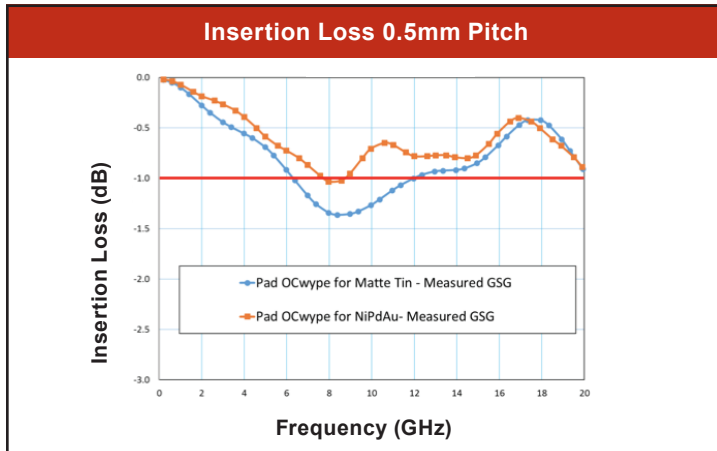
Mechanical Performance	Pad OCwype™ for Matte Tin Packages	Pad OCwype™ for NiPdAu Packages
Contact Free Height	3.19 mm	3.19 mm
Contact Compressed Height	2.79 mm	2.79 mm
Contact Compliance	0.40 mm	0.40 mm
Contact Force (per contact)	30–40 grams	30–40 grams
Contact Life (# of insertions)	Elastomers = 250,000 Contacts = 500,000 Housing = 2,000,000+	Elastomers = 250,000 Contacts = 500,000 Housing = 2,000,000+
Contact Tip Coplanarity	0.05 mm	0.05 mm
Temperature	-40C to 155C	-40C to 155C
Housing Material	Torlon 4203	Torlon 4203
Contact Material	BeCuNiAu	XL-2

## Pitches Available

0.35 to 1.27 mm

## Manual Actuator

DL-VCMA Plus™  
SL-VCMA



**Johnstech®**

Johnstech International Corporation • 1210 New Brighton Boulevard • Minneapolis, MN 55413-1641 USA  
Tel 612.378.2020 • Fax 612.378.2030 • www.johnstech.com • E-mail info@johnstech.com