



# PAD ROL<sup>®</sup> 200 XT<sup>™</sup>

FOR QFN, DFN, AND OTHER PAD-STYLE APPLICATIONS

## The Automotive Test Solution That Drives Toward Higher Test Yields

As a designer of high performance devices for the automotive industry, you know that your applications are growing in both numbers and complexity. Since this trend is expected to continue for the next several years, it is more important than ever to require extreme versatility and superior reliability from your test solutions. Whether you are testing Audio & Infotainment, Vehicle Networking, Powertrain, or other automotive device applications, look for the solution that drives your results toward higher test yields and delivers superior production throughput.



Johnstech's *Pad ROL<sup>®</sup> 200 XT<sup>™</sup>* Automotive Contactor is just the product you're looking for! This Xtreme Temperature (XT<sup>™</sup>) capable product is designed to maximize your test results, regardless of your tri-temp testing objectives! Even if you are not testing outside the temperature limits of standard Contactors and sockets, the robust design of the XT<sup>™</sup> Contactor provides additional design margin and certainly satisfies even your roadmap requirements.

The *Pad ROL<sup>®</sup> 200 XT<sup>™</sup>* Automotive Contactor improves test yields and increases test reliability through several features, including:

### Electrical Reliability Improves Yields

- Patented, One-Piece ROL<sup>®</sup> Contacts
- Delivers Lowest Contact Resistance (CRES)
- High Current Carrying Capability
- Low Inductance
- Extremely Stable Contact Resistance (CRES)
- High Frequency Capability
- Wiping Contact Clears Debris

### Mechanically Robust

- Long Life ROL<sup>®</sup> Contacts
- Temperature Test Stability
- Patented Wiping Lengthens MTBA



Electrical Specifications	Matte Tin Configuration	NiPdAu Configuration
Inductance:	Self: 0.45 nH Mutual: 0.21 nH	Self: 0.55 nH Mutual: 0.24 nH
Capacitance:	Ground: 0.27 pF Mutual: 0.12 pF	Ground: 0.23 pF Mutual: 0.12 pF
S <sub>21</sub> Insertion Loss (GSG):	-1dB @ 23.1 GHz	-1dB @ 18.5 GHz
S <sub>11</sub> Return Loss (GSG):	-20dB @ 5.0 GHz	-20dB @ 5.8 GHz
S <sub>41</sub> Crosstalk (GSSG):	-20dB @ 21.86 GHz	-20dB @ 29.5 GHz
Average CRES:	30 mΩ	20 mΩ
Current Carrying Capacity*: (Duty Cycle 100%, 50%, 1%):	3.8A, 6.4A, 9.8A	3.0A, 5.1A, 9.3A
Current Leakage:	<1pA @ 10V	
Nearest Decoupling Area:	1.58 mm	

Mechanical Specifications	Matte Tin Configuration	NiPdAu Configuration
Compressed Height:	1.40 mm	1.40 mm
Electrical Length:	2.00 mm	2.07 mm
Contact Life (# of insertions):	Elastomers = 330,000 Contacts = 500,000+ Housing = 2,200,000	
Contact Compliance:	0.20 mm	
Contact Force (per contact):	@ -65°C 40 grams @ 25°C 40 grams @ +175°C 60 grams	25 grams 25 grams 40 grams
Contact Tip Coplanarity:	0.05 mm	
Temperature:	-65°C to +175°C	
Housing Material:	High Performance Torlon <sup>®</sup>	
Contacts:	Gold-Plated	Low-Force XL-2
Contact Material:	BeCuNiAu	Gold-plated Alloy

Results for 0.5mm pitch configurations. Specifications provided here are based on internal testing at Johnstech, customer production sites, and third party electrical testing. Actual individual results may vary based on a wide range of variables including: handler/contacter/load board interface, handler plunge depth and velocity, device presentation, alignment plate condition, package plating characteristics, test floor conditions, maintenance activities, mounting/fastening techniques, non-coplanarity from site to site, non-coplanar docking, and temperature extremes.

