

## PRODUCT QUALIFICATION REPORT

### RR1X2 Digital Latch Sensor Series

Test	Stress	Duration	Sample Size
Parametric Tests	Evaluate Data Sheet Spec. @ +25°C	N/A	All Devices Used for Qualification
Pre-Conditioning	Thermal, Mechanical for Package Integrity: • SOT23	MSL1	2 lots (520 units)
Temperature Cycling	Thermal Mechanical	-55°C and +125°C @ 3 cycles/hr, 1,000 cycles	2 lots (154 units)
Unbiased HAST	Thermal Moisture	+130°C, RH 85%, 96 hours	2 lots (154 units)
Biased HAST	Bias, Thermal Moisture	V <sub>DD</sub> = 4.0 V @ +130°C, RH 85%, 96 hours	2 lots (154 units)
HTOL	Bias, Thermal	1,000 hours (See Bias Conditions in Table 5 of Section 6.5)	2 lots (154 units)
High Temperature Storage	Thermal, Material Relaxation	1,000 hours (See Static Bake Conditions in Table 6 of Section 6.6)	2 lots (154 units)
Latch-Up	Electrical	JESD78 (±200 mA)	1 lot
ESD	Human Body Model	JEDEC-JS001-2014	1 lot

HAST – Highly accelerated temperature/humidity stress test  
 HTOL – High temperature operation life

*\* This plan is based on the guidelines of the JESD47I, Stress-Test-Driven Qualification of Integrated Circuits, published by JEDEC Solid State Technology Association.*