

Sensitron New Space Diodes

This reference guide outlines the test and screening flows for various quality levels for Sensitron’s axial lead and surface mount hermetic MIL-PRF-19500 qualified glass diode product line. The SNS series is intended to be used for lower cost “New Space” missions. All product ratings are the same as the JANS qualified part numbers. To order SNS series diodes use the SNS prefix before the JEDEC registered diode part number (example SNS1N5806US)

Per MIL-PRF-19500, Appendix E & J	MIL-STD-750 Test Method	COTS	SNS	JANTXV	JANS
Wafer Fabrication		Approved Facility	Approved Facility	Approved Facility	Approved Facility
Die Visual Inspection	2073				100%
Controlled Baseline		Yes	Yes	Yes	Yes
Assembly		Approved Facility	Approved Facility	Approved Facility	Approved Facility
Stabilization Bake	1032	Optional	Optional	Optional	Optional
Temperature Cycle	1051		100%	100%	100%
Thermal Impedance	3101	100%	100%	100%	100%
First Electrical Test	Multiple	100%	100%	100%	100%
Internal Visual Inspection	2074		100%	100%	100%
Constant Acceleration	2006				100% (1)
PIND	2052		Optional		100% (1)
Serialization					100%
Read and Record					100%
HTRB	1038			100%	100%
Read and Record					100%
Burn-in	1038			100%	100%
Read and Record					100%
Hot and Cold Test	Multiple		100%		100%
Scope Display (2)	4023		100%	100%	100%
Hot Solder Dip		100%	100%	100%	100%
Lead Finish		SnPb Hot Solder Dip	SnPb Hot Solder Dip	SnPb Hot Solder Dip	SnPb Hot Solder Dip
Hermetic Seal (3)	1071	100% (4)	100%	100%	100%
Marking		Ink/Laser	Ink/Laser	Ink/Laser	Ink/Laser
Radiography	2076				100%
Go No Go Test		100%	100%	100%	100%
External Visual	2071		100%	100%	100%
Pack		100%	100%	100%	100%
Final QA Inspection		100%	100%	100%	100%
Quality Conformance-Group A			Sample	Sample	Sample
Quality Conformance-Group B			Generic (5)	Sample	Sample
Quality Conformance-Group C			Generic (5)	Periodic	Sample
Quality Conformance-Group D			If Required		If Required

(1) Applicable to cavity packages only

(2) When applicable by MIL-PRF-19500 slash sheet

(3) Non-transparent glass encased double plug, non-cavity axial lead diodes use test method 2068 of MIL-STD-750 in lieu of test method 1071 of MIL-STD-750

(4) Not applicable to non-transparent glass encased double plug, non-cavity axial lead diodes

(5) Group B and C generic data from the JAN qualified product line available