

APPENDIX D

Screening Guides

The following screening procedures are suggested guides for assemblies and their components:

- HRP 101: Screening Guide for Discrete Diodes
- HRP 102: Screening Guide for Finished Bridge Rectifier Assemblies
- HRP 103: Screening Guide for Capacitors Used in Multiplier Assemblies
- HRP 104: Screening Guide for Resistors Used in Multiplier Assemblies
- HRP 105: Screening Guide for Multiplier Assemblies
- HRP 106: Screening Guide for Space Level Hybrid Multiplier Assemblies

HRP 101: Discrete Diodes

The following screening for discrete diodes is a guide for a suggested procedure. It can be modified or adjusted to suit requirements. This is taken from MIL-PRF-19500 Table IV, JANTX screening.

| | | | |
|----|---|--|--|
| 1) | High Temperature Life (non-operating life/ stabilization bake MIL-STD-750) | Method 1032 | 48 hrs @ +175°C |
| 2) | Temperature Cycling MIL-STD-750 | Method 1051 Condition C | 20 Cycles -65°C to +175°C 15 min. extremes No dwell @25°C |
| 3) | Interim Electrical | | Forward Voltage Drop Leakage Current |
| 4) | High Temperature Reverse Bias (HTRB) MIL-STD-750 | Method 1038 Condition A | 96 hrs min. @ TA=150°C and min. applied voltage at 80% of rated VR (TC or TL is optional) |
| 5) | Final Electrical MIL-STD-750 | Method 4011 Method 4016 Method 4031 Method 4021 | Forward Voltage Drop Leakage Current Reverse Recovery Time Peak Inverse Voltage |