

Contents

Generic Requirements Notice Of Disclaimer	iii
Preface	xi
1 Introduction	
1.1 Purpose and Scope	1-1
1.2 Intended Audience	1-2
1.3 Organization of This Document	1-2
1.4 Updating and Reissue Information	1-2
1.5 Definitions of Technical Terminology	1-2
1.6 Requirements Terminology	1-5
1.7 Requirement Labeling Conventions	1-6
1.7.1 Numbering of Requirement and Related Objects	1-6
1.7.2 Requirement, Conditional Requirement, and Objective Identification . .	1-7
2 General Information	
2.1 Generic General Product Description	2-1
3 General Requirements	
3.1 Human Factors	3-1
3.2 Environmental Conditions	3-1
3.3 Electrical Characteristics	3-2
3.4 Physical Characteristics	3-5
3.5 Labeling	3-5
3.6 Packing and Shipping	3-6
3.7 Quality Assurance	3-6
4 Requirements and Verification Procedures	
4.1 Signal Power Interference at Frequencies Above Voice Band	4-1
4.2 Transmission Performance	4-1
4.2.1 Transmit Characteristics	4-1
4.2.1.1 Transmit Response	4-1
4.2.1.2 Background Discrimination	4-4
Transitions	4-5
4.2.1.3 Harmonic Distortion	4-5
4.2.1.4 Intermodulation Distortion	4-8
4.2.1.5 Noise	4-8
4.2.1.6 Output Impedance	4-9
4.2.1.7 Direct Current Resistance	4-11
4.2.2 Receive Characteristics	4-13
4.2.2.1 Response	4-13
4.2.2.2 Acoustic Limiting	4-17

4.2.2.3	Input Impedance	4-21
4.2.3	Reverse Sidetone Loss	4-21
4.2.4	Harmonic Distortion	4-22
4.2.5	Intermodulation Distortion	4-22
4.2.6	Features for the Hearing Impaired	4-23
4.3	Electrical Environment	4-24
4.3.1	Dielectric Strength and Exposed Surfaces (Normal)	4-24
4.3.1.1	2500- and 5000-Volt rms Dielectric Requirements	4-24
4.3.1.2	Listing by NRTC (Normal)	4-25
4.3.1.3	Power-Fault Exposure (Normal)	4-25
4.3.1.4	Impulse Let-Through Requirement (Normal)	4-26
4.3.2	Electromagnetic Interference (Normal)	4-26
4.3.3	Electrostatic Discharge Dissipation (Normal)	4-26
4.3.4	Plastics at the Physical interface with the User	4-26
4.3.4.1	Requirements	4-27
4.3.4.2	Demonstration of Compliance	4-27
4.3.5	Electrostatic Discharge (ESD)	4-27
4.3.6	Materials	4-28
4.3.6.1	Plastic Surfaces	4-28
4.3.6.2	Cords and Wiring	4-29
4.4	Physical Environment	4-29
4.4.1	Shock (Normal)	4-29
4.4.1.1	Headset Packaged for Shipment	4-30
4.4.1.2	Headset Unpackaged	4-30
4.4.2	Vibration (Normal)	4-30
4.4.3	Storage Environment (Normal)	4-31
4.4.3.1	Requirement	4-31
4.4.3.2	Demonstration of Compliance	4-31
4.4.4	Operational Ambient (Normal)	4-32
4.4.4.1	Requirement	4-32
4.4.4.2	Demonstration of Compliance	4-32
4.4.5	Thermal Shock (Normal)	4-33
4.4.5.1	Requirement	4-33
4.4.5.2	Demonstration of Compliance	4-33
4.4.6	Temperature and Humidity Cycling (Normal)	4-34
4.4.6.1	Requirement	4-34
4.4.6.2	Demonstration of Compliance	4-34
4.4.7	Pressure (Normal)	4-34
4.4.8	Fungus Growth	4-35
4.4.9	Corrosion	4-35
4.4.10	Sand, Dust, and Insects	4-36

Appendix A: Test Requirements and Procedures

A.1	Test Equipment Requirements	A-1
A.1.1	Alternating Current High-Potential Test Set	A-1
A.1.2	Voltage- and Current-Measuring Devices	A-1

A.1.3 Dielectric Strength Test Container	A-1
A.2 Characteristics of Test Generators	A-2
A.2.1 Open-Circuit Voltage	A-2
A.2.2 Steady-State Current	A-2
A.3 Test Procedure	A-4
A.3.1 600-Volt rms Test Procedure	A-4
A.3.2 2500-Volt rms Test	A-5
A.3.3 5000-Volt rms Test	A-6
A.3.4 Power Fault Exposure Test	A-6

Appendix B: References

B.1 Telcordia Documents	B-1
B.2 External References	B-1

Requirement-Object Index

List of Figures

Figure 2-1	Headset and Equipment Interfaces (Mono Type)	2-3
Figure 2-2	Plug Assembly	2-4
Figure 4-1	Test Circuit for Transmit Transfer Characteristics	4-3
Figure 4-2	Transmit Frequency Response Template	4-6
Figure 4-3	Transmit Input-Output Characteristic	4-7
Figure 4-4	Transmit Noise Test Circuit	4-9
Figure 4-5	Transmit Alternating Current Impedance Test Circuit	4-11
Figure 4-6	Transmit Direct Current Resistance Circuit	4-12
Figure 4-7	Test Circuit for Receive Transfer Characteristics	4-15
Figure 4-8	Receive Response Template	4-17
Figure 4-9	Acoustic Limiting Test Circuit	4-19
Figure 4-10	Receive Alternating Current Impedance Test Circuit	4-22
Figure 4-11	Test Configuration	4-28
Figure A-1	Open-Circuit Voltage	A-3
Figure A-2	Steady-State Current	A-4
Figure A-3	Test Set-Up for 600-Volt Dielectric Strength Test and Impulse Let-Through Test	A-7

List of Tables

Table 4-1	Dielectric Breakdown Evaluations	4-25
Table 4-2	Temperature and Humidity Conditions	4-34
Table 4-3	Acceptable Concentration of Contaminants	4-35