



| FEATURE | Current Products | Advanced Products | Emerging Products |
|---|------------------|-------------------|-------------------|
| 1 Drilling Aspect Ratio—Drilled Hole Size | 8: 1 | 12: 1 | 15: 1 |
| 2 Min. Drilled Hole Size (vias) | 0.008 | 0.007 | 0.006 |
| 3 Min. Finished Hole Size (vias) | 0.008 | 0.006 | 0.004 |
| 4 Min. Outer Layer Via Land Size | 0.018 | 0.016 | 0.014 |
| 5 Min. Inner Layer Via Land Size | 0.020 | 0.018 | 0.016 |
| 6 Min. Via Relief on Power / Ground Planes | 0.024 | 0.020 | 0.014 |
| 7 Min. Blind / Buried Via Land Size | 0.020 | 0.018 | 0.014 |
| 8 Min. Blind / Buried Via Hole Size (Drilled) | 0.010 | 0.008 | 0.006 |
| 9 Min. Outer Layer Line Width | 0.004 | 0.003 | 0.003 |
| 10 Min. Inner Layer Line Width | 0.004 | 0.003 | 0.002 |
| 11 Min. Outer Layer Line to Line Spacing | 0.004 | 0.003 | 0.003 |
| 12 Min. Inner Layer Line to Line Spacing | 0.004 | 0.003 | 0.002 |
| 13 Min. Line to Via Land Spacing | 0.004 | 0.003 | 0.003 |
| 14 Layer to Layer Registration Tolerance | 0.005 | 0.003 | 0.003 |
| 15 Min. Component Pitch | 0.016 | 0.012 | 0.006 |
| 16 Max. Overall Board Thickness | 0.250 | 0.250 | 0.250 |
| 17 Min. Dielectric Thickness Signal-Signal | 0.0025 | 0.002 | 0.002 |
| 18 Minimum Soldermask Webbing | 0.004 | 0.003 | 0.0025 |
| 19 Line to SMT Minimum Space | 0.007 | 0.006 | 0.004 |
| 20 Min. Base Copper Weights | 0.0007 | 0.00035 | 0.00035 |
| 21 Layer Count | 2-16 | 18-24 | 24+ |
| 22 Maximum Panel Size | 21x24 | 21x24 | 21x24 |
| 23 Fabrication Radius | 0.031 | 0.016 | 0.010 |
| 24 Warpage (Design Dependent) | 1.00% | 0.75% | 0.50% |
| 25 Plated Hole Tol. (Design Dependent) | +/- .003 | +/- .002 | +/- .002 |
| 26 Impedance Tolerance | +/- 10% | +/- 8% | +/- 5% |

AVAILABLE SURFACE FINISHES

Hot Air Solder Level (HASL)
Immersion White Tin
ENIG
Immersion Silver
Electroplated Gold

Electroplated Nickel
Organic Coatings (OSP)
Immersion Nickel
Wirebondable Gold
Lead free HASL

AGENCY QUALIFICATIONS

UL (File # E134393) 130 Deg MOT
ISO 9001:2000 (Smithers Cert # 09.176.1)
IPC-6012 Class 3
MIL-PRF-55110 (Cage Code 1BQS8)

COMMUNICATION FORMATS

Email: techservice@multicircuits.com
FTP: <ftp://ftp2.multicircuits.com>
Drill Files: Excellon V1 or V2
Artwork Files: Gerber 274, Gerber 274X, ODB++
Fabrication Drawings: HPGL, DXF, DWG, PLT, Gerber