The Institute for Interconnecting and Packaging Electronic Circuits
2215 Sanders Road • Northbrook, IL 60062

IPC-TM-650
TEST METHODS MANUAL

Number	
2.5.4	
Subject	
Current Carrying Capacity, Multilayer Printed Wiring	
Date	Revision
4/73	
Originating Task Group	
Electrical Continuity Testing Task Group (7-32c)	

1.0 Scope

This test method is to determine allowable current load for conductors.

2.0 Applicable Documents

MIL-STD-275 Printed Wiring for Electronic Equipment.

3.0 Test Specimen

Test coupon ''G'' on test pattern in section 5.8.3 of this publication or production boards.

4.0 Apparatus

Regulated power supply, load resistor, and suitable meter.

5.0 Procedure

5.1 Test

5.1.1 Apply required current for a period of 3 minutes to terminal A-1 and E-13 of specimen.

5.1.2 Select a load resistor such that when positive and ground terminals of a regulated power supply are shunted by the resistor, a current of 2 amps will flow.

5.1.3 The circuitry to be tested is placed in series with the shunt resistor.

5.1.4 After 3 minutes of current flow, observations should be made to see if there is a reduction of current flow.

5.1.5 Note should also be made to see if there has been a temperature rise in excess of 20°C. Refer to Fig. 1.

5.2 Evaluation. Observe and record meter readings and visual results.

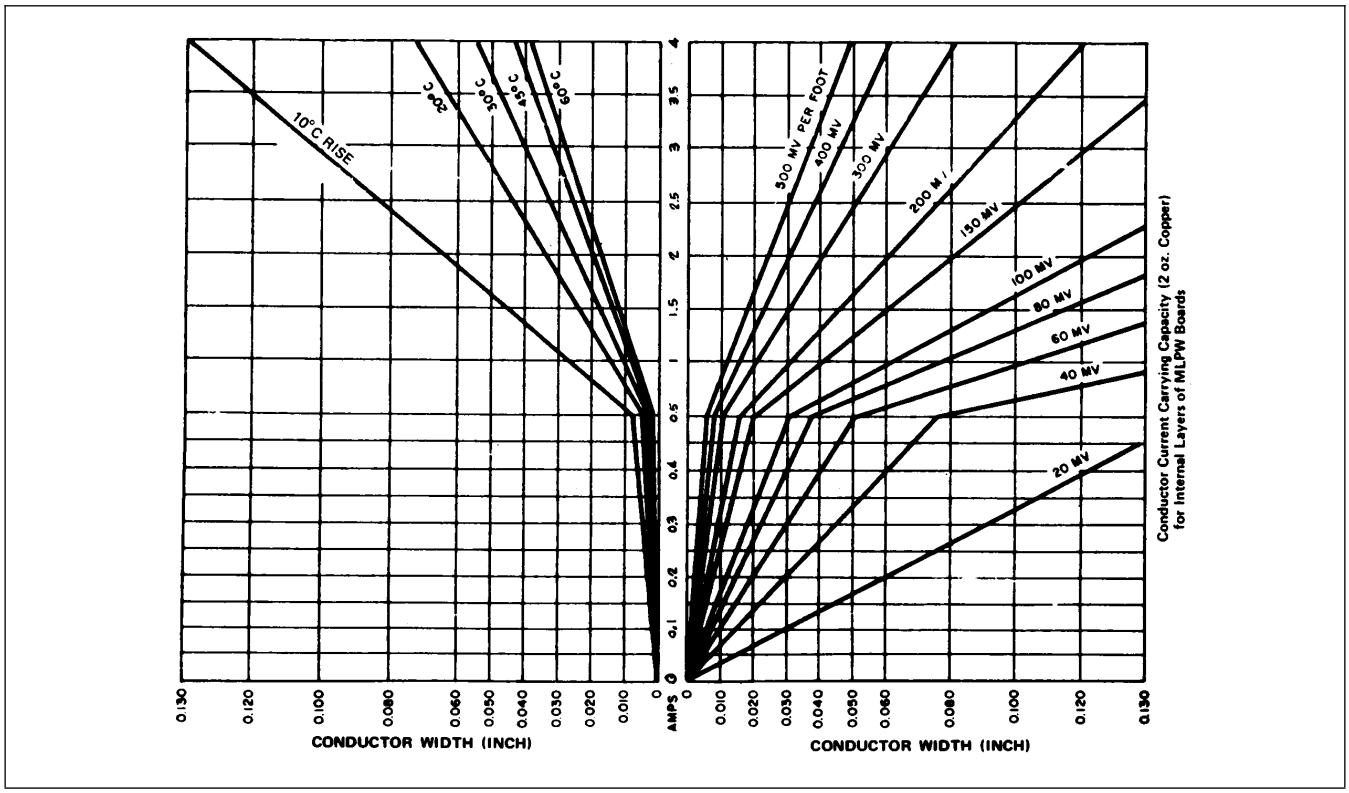

Figure 1 Conductor Thickness and Width