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





# 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

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)	

**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

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