### Automotive Electronics Council Component Technical Committee

# ATTACHMENT 3 AEC - Q200 - 003 - REV B BEAM LOAD (BREAK STRENGTH) TEST

## Automotive Electronics Council

Component Technical Committee

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## **Automotive Electronics Council**

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## **METHOD - 003**

### PASSIVE COMPONENT SURFACE MOUNTED CERAMIC CAPACITORS BEAM LOAD (BREAK STRENGTH) TEST

1.0 SCOPE

### 1.1 DESCRIPTION:

This specification establishes the procedure and criteria for evaluating break strength.

#### **1.2 Reference Documents:**

Not Applicable

#### 2.0 EQUIPMENT:

#### 2.1 Test Apparatus:

The apparatus required for testing shall be equivalent to the fixture shown in Figure 1.

#### 3.0 TEST PROCEDURE:

#### 3.1 Sample Size:

The total number of components and lots to be tested is listed in Table 1 of AEC-Q200 specification.

#### 3.2 Test Environment:

Place the part in the beam load fixture. Apply a force until the part breaks or the minimum acceptable force level required in the user specification(s) is attained.

#### 3.3 Measurement:

Prior to beam load testing, complete the external visual (TST NO. 9) test. Record the force level at which the part breaks to conclude the test.

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**Breaking strength** Tested with the fixture described below

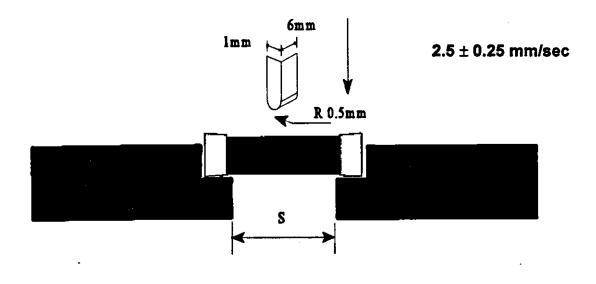


Figure 1: Typical equivalent circuit for Beam Load Test Note: S =  $.55 \pm 0.05$  of the nominal length of Device under Test

#### 4.0 **FAILURE CRITERIA**

During (if applicable) and after subjection to test, part rupture prior to any minimum user force requirement shall be considered a failure.

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## **Revision History**

Rev #	Date of change	Brief summary listing affected paragraphs
-	April 30, 1996	Initial Release.
A	March 15, 2000	Removed CDF designation through document. Removed Chrysler, Delco, and Ford logo from each heading. Add Component Technical Committee to each heading.
В	June 1, 2010	Notice Statement (Page 2) Added. Format Updated.