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Irish Standard  
I.S. EN 62490-2:2010

# ESL measuring method -- Part 2: Surface mount capacitors for use in electronic equipment (IEC 62490 -2:2010 (EQV))

## I.S. EN 62490-2:2010

*Incorporating amendments/corrigenda issued since publication:*

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
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**EN 62490-2**

September 2010

ICS 31.060.01

English version

**ESL measuring method -  
Part 2: Surface mount capacitors for use in electronic equipment  
(IEC 62490-2:2010)**

Méthode de mesure de l'ESL -  
Partie 2: Condensateurs pour montage  
en surface utilisés dans les équipements  
électroniques  
(CEI 62490-2:2010)

ESL-Messverfahren -  
Teil 2: Oberflächenmontierbare  
Kondensatoren zur Verwendung  
in Geräten der Elektrotechnik  
und Elektronik  
(IEC 62490-2:2010)

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## **Foreword**

The text of document 40/2045/FDIS, future edition 1 of IEC 60490-2, prepared by IEC TC 40, Capacitors and resistors for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62490-2 on 2010-09-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- |  |       |            |
|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2011-06-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn   | (dow) | 2013-09-01 |

Annex ZA has been added by CENELEC.

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## **Endorsement notice**

The text of the International Standard IEC 62490-2:2010 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60384-1	2008	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN 60384-1	2009

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**ESL MEASURING METHOD –****Part 2: Surface mount capacitors  
for use in electronic equipment****FOREWORD**

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International Standard IEC 62490-2 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

The text of this standard is based on the following documents:

FDIS	Report on voting
40/2045/FDIS	40/2057/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.



A list of all the parts in the IEC 62490 series, under the general title *ESL measuring method*, can be found on the IEC web site.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
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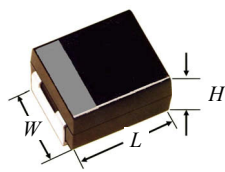
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## ESL MEASURING METHOD –

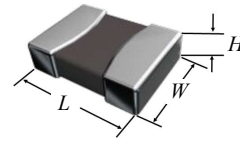
### Part 2: Surface mount capacitors for use in electronic equipment

#### 1 Scope

This part of IEC 62490 provides the ESL measuring method for the surface mount capacitors for use in electronic equipment.



IEC 1731/10



IEC 1732/10

Figure 1a – Lead frame electrode terminal

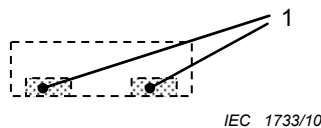
Figure 1b – Thin coating electrode terminal

**Figure 1 – Lead frame and thin coating types of surface mount capacitors and the specification of the dimensions ( $L$ ,  $W$ , and  $H$ )**

The ESL measurement method can be applicable to the surface mount capacitors with the following properties, but not limited to these:

- a) capacitance range: 10  $\mu\text{F}$  to 1 000  $\mu\text{F}$ ;
- b) size:  $L \times W = 3,2 \text{ mm} \times 1,6 \text{ mm}$  to  $7,3 \text{ mm} \times 4,3 \text{ mm}$ ,  $H = 4,0 \text{ mm}$ ;
- c) ESL range: 5 nH or less.

NOTE The surface mount capacitors in this document are limited to capacitors with lead frame or with thin coated terminals, see Figure 1. The scope of this document does not include capacitors with face down terminals, see Figure 2.



IEC 1733/10

#### Key

- 1 terminals (shaded section)

**Figure 2 – Surface mount capacitors with face down terminal**

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60384-1:2008, *Fixed capacitors for use in electronic equipment – Part 1: Generic specification*

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