

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Surface mounted piezoelectric devices for frequency control and selection –
Standard outlines and terminal lead connections –
Part 4: Hybrid enclosure outlines**

**Dispositifs piézoélectriques à montage en surface pour la commande et le choix
de la fréquence – Encombrements normalisés et connexions des sorties –
Partie 4: Encombrements des enveloppes hybrides**

<https://standards.iteh.ai/en/standards/iec/136a36d7-96ab-4b7a-8237-1f0e0c118609/iec-61837-4-2004>



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SURFACE MOUNTED PIEZOELECTRIC DEVICES
FOR FREQUENCY CONTROL AND SELECTION –
STANDARD OUTLINES AND TERMINAL LEAD CONNECTIONS –**

Part 4: Hybrid enclosure outlines

FOREWORD

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International Standard IEC 61837-4 has been prepared by IEC technical committee 49: Piezoelectric and dielectric devices for frequency control and selection.

This International Standard shall be read in conjunction with IEC 61240.

This bilingual version (2013-09) corresponds to the monolingual English version, published in 2004-05.

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

FDIS	Report on voting
49/657/FDIS	49/679/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.

The French version of this standard has not been voted upon.

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

IEC 61837 consists of the following parts under the general title *Surface mounted piezoelectric devices for frequency control and selection – Standard outlines and terminal lead connections*:

Part 1: Plastic moulded enclosure outlines;

Part 2: Ceramic enclosures;

Part 3: Metal enclosures;

Part 4: Hybrid enclosure outlines.

The committee has decided that the contents of this publication will remain unchanged until 2008. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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SURFACE MOUNTED PIEZOELECTRIC DEVICES FOR FREQUENCY CONTROL AND SELECTION – STANDARD OUTLINES AND TERMINAL LEAD CONNECTIONS –

Part 4: Hybrid enclosure outlines

1 Scope

This part of IEC 61837 specifies the outline drawings for surface mounted piezoelectric devices with hybrid enclosure outlines.

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 61240:1994, *Piezoelectric devices – Preparation of outline drawings of surface mounted devices (SMD) for frequency control and selection – General rules*

3 Dimensions of surface mounted piezoelectric devices with hybrid enclosure outlines

The dimensions in this standard apply to surface mounted piezoelectric devices.

Only those dimensions are given which meet the requirements of IEC 61240.

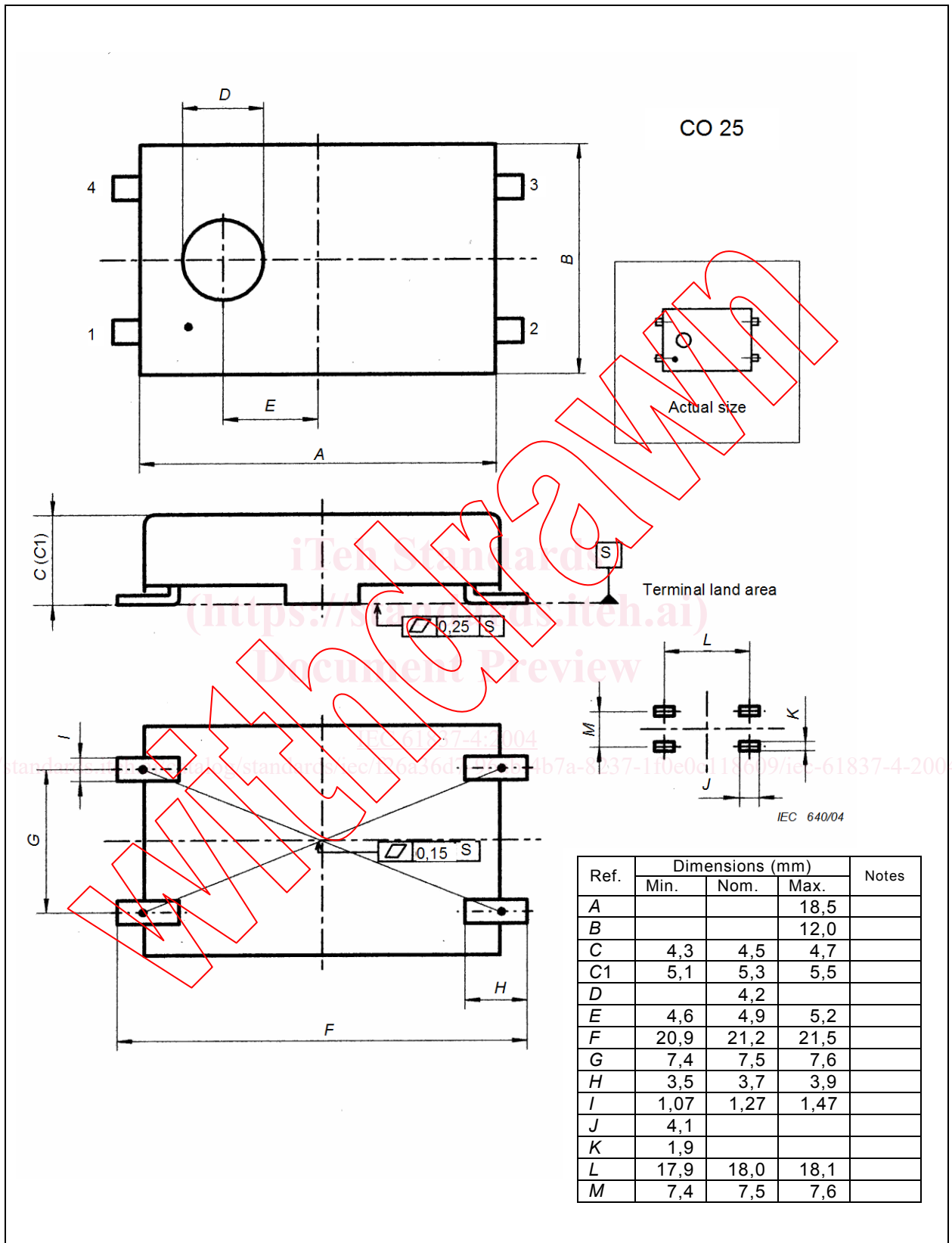
4 Designation of surface mounted piezoelectric devices with hybrid enclosure outlines

Table 1 – Designation of surface mounted piezoelectric devices with hybrid enclosure outlines

No.	Type	Sheet No.	Description	National reference	
				Country	Reference
1	CO 25	Sheet 1	Hybrid SMD enclosure with four bent connection pins		
2	CO 26	Sheet 2	Hybrid SMD enclosure with four connection pads		
3	CO 27	Sheet 3	Hybrid SMD enclosure with six connection pads		
4	CO 28	Sheet 4	Hybrid SMD enclosure with seven connection pads		
5	CO 29	Sheet 5	Hybrid SMD enclosure with eight connection pads		
6	CO 30	Sheet 6	Hybrid SMD enclosure with six connection pads		

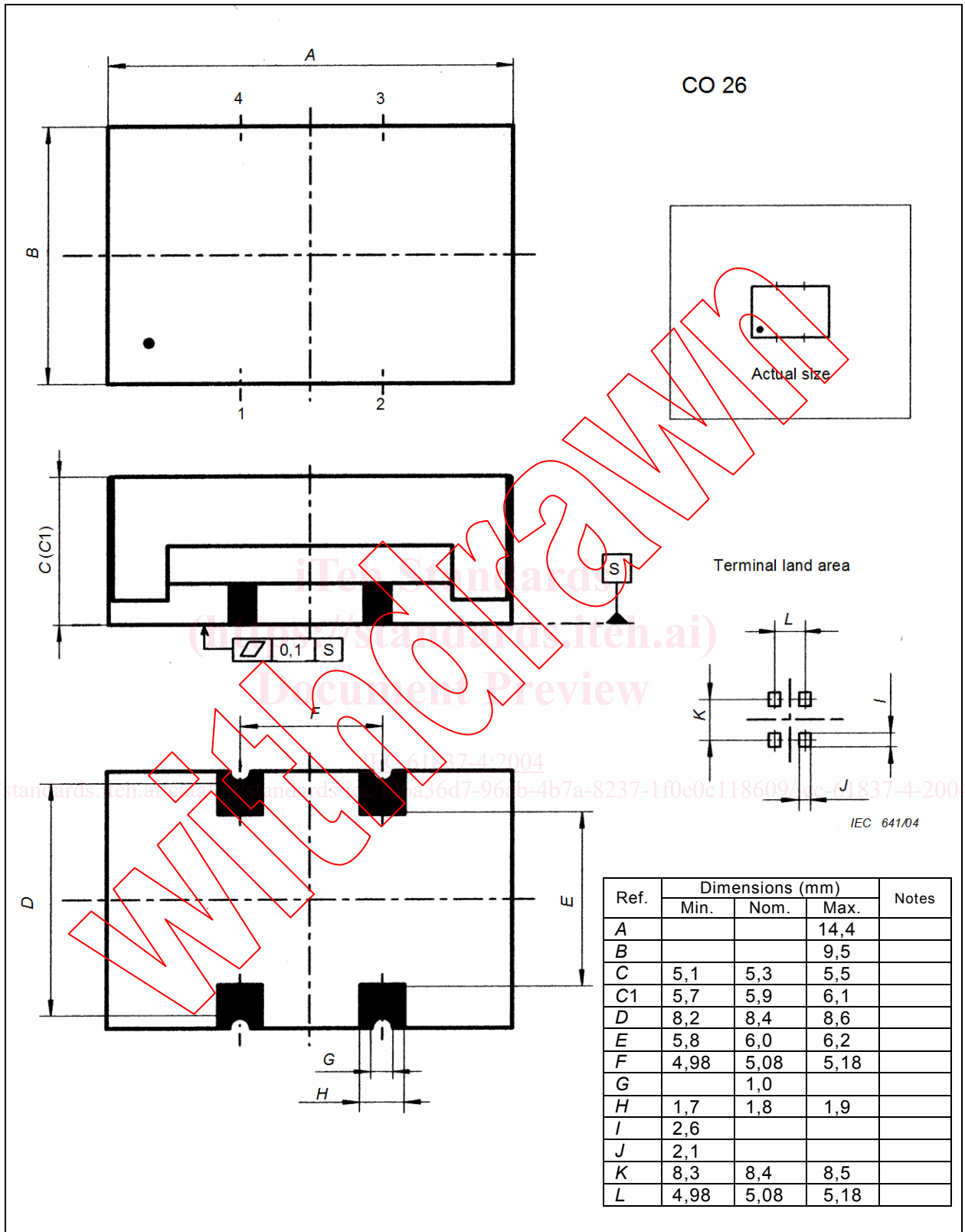
Table 2 – Lead connections

Crystal oscillator outline	Position (lead number)	Function
CO 25	1	NC (IC)
	2	Ground
	3	Output
	4	Vcc
CO 26	1	NC (IC)
	2	Ground
	3	Output
	4	Vcc
CO 27	1	Vc
	2	NC (IC)
	3	Ground
	4	Output
	5	NC (IC)
	6	Vcc
CO 28	1	NC (IC)
	2	Vref
	3	Vcc
	4	Output
	5	NC (IC)
	6	NC (IC)
	7	Ground
CO 29	1	Vc
	2	Optional
	6	Disable
	7	Ground
	8	Output
	9	Output
	13	Optional
	14	Vcc
CO 30	1	Vc
	2	Vcc
	3	Optional
	4	Output
	5	Ground
	6	Optional



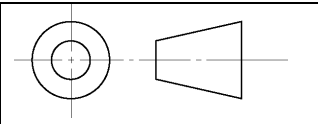
Hybrid SMD enclosure with four bent connection pins – Type CO 25

Scale
4:1



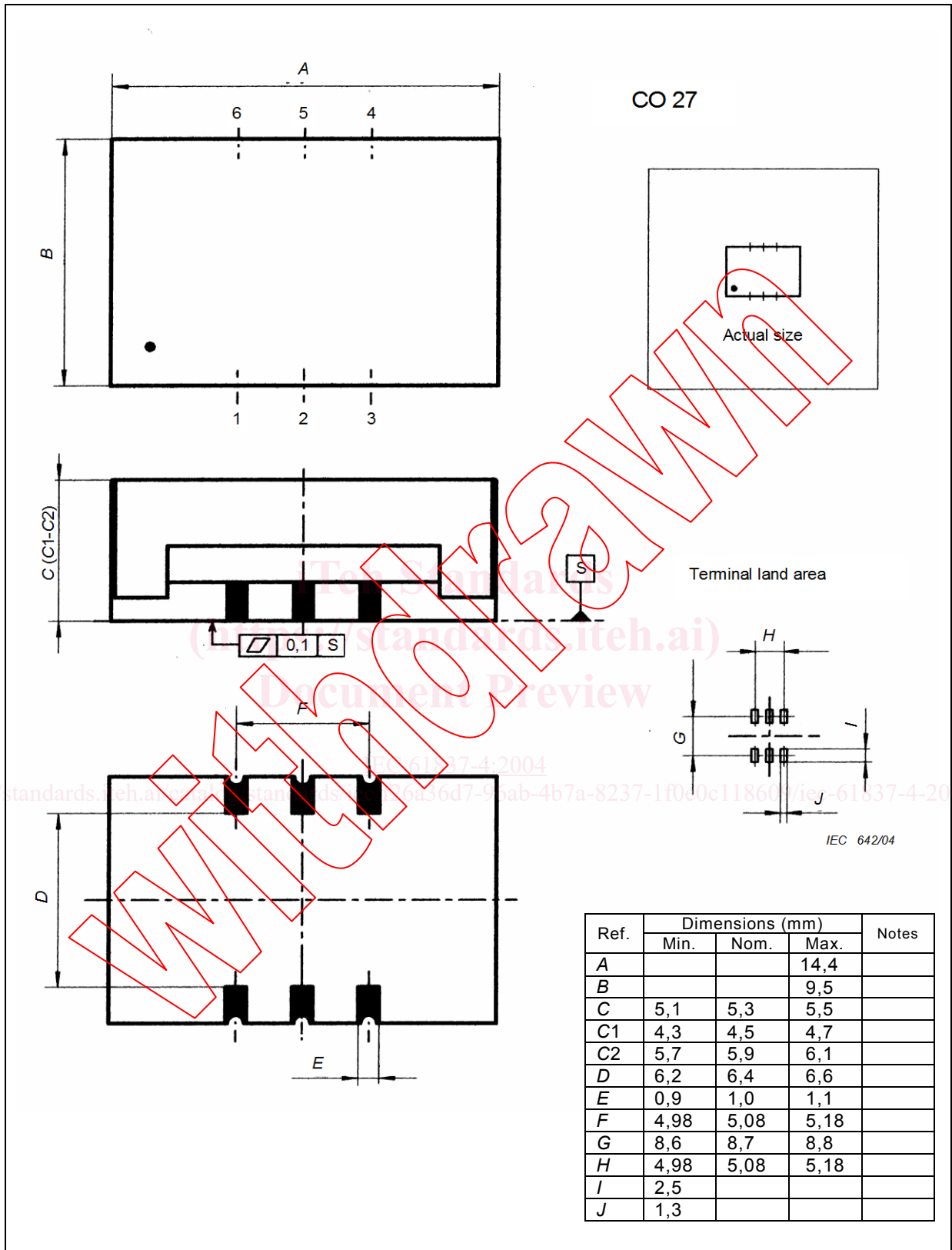
Hybrid SMD enclosure with four connection pads – Type CO 26

Scale 5:1



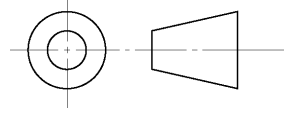
Sheet 2

Date: 2004-05



Hybrid SMD enclosure with six connection pads –
Type CO 27

Scale
5:1



Sheet 3

Date: 2004-05