IEC 61837-1

Edition 2.0 2012-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Surface mounted piezoelectric devices for frequency control and selection – Standard outlines and terminal lead connections – Part 1: Plastic moulded enclosure outlines

Dispositifs piézoélectriques à montage en surface pour la commande et le choix de la fréquence – Encombrements normalisés et connexions des sorties – Partie 1: Encombrements des enveloppes en plastique moulées

IEC 61837-1:2012

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Surface mounted piezoelectric devices for frequency control and selection – Standard outlines and terminal lead connections – Part 1: Plastic moulded enclosure outlines

Dispositifs piézoélectriques à montage en surface pour la commande et le choix de la fréquence – Encombrements normalisés et connexions des sorties – Partie 1: Encombrements des enveloppes en plastique moulées

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 1: Plastic moulded enclosure outlines

FOREWORD

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International Standard IEC 61837-1 has been prepared by IEC technical committee 49: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection.

This second edition cancels and replaces the first edition published in 1999. It is a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- one enclosure type (SIP-L5/01) has been deleted;
- Configuration symbol of enclosures is currently consolidated into one as DCC (dual chip carrier).

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

CDV	Report on voting
49/930/CDV	49/969/RVC

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 International Standard shall be read in conjunction with IEC 61240:1994. IEC 61240:1994 deals with standard outlines and terminal lead connections as they apply to SMDs for frequency control and selection in plastic moulded enclosures.

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

A list of all parts of the IEC 61837 series, published under the general title *Surface mounted piezoelectric devices for frequency control and selection – Standard outlines and terminal lead connections*, 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

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- withdrawn,
- replaced by a revised edition, or
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SURFACE MOUNTED PIEZOELECTRIC DEVICES FOR FREQUENCY CONTROL AND SELECTION – STANDARD OUTLINES AND TERMINAL LEAD CONNECTIONS –

Part 1: Plastic moulded enclosure outlines

1 Scope

This part of IEC 61837 deals with standard outlines and terminal lead connections as they apply to SMDs for frequency control and selection in plastic moulded enclosures and is based on IEC 61240.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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*[1]

3 Configuration of enclosures

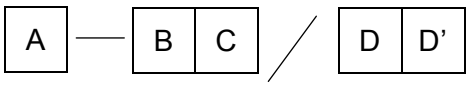
These enclosures are made of plastic moulded materials with the terminal leads based on the descriptive designation system for semiconductors, devices package.

The configuration symbols are shown as follows:

– DCC (dual chip carrier)

4 Designation of types

The designation of types is shown in four parts as follows:



A: Configuration symbol of enclosures:
  – DCC (dual chip carrier);

B: Structure of terminal leads:
  – J: leaded type;

C: Number of terminal leads

D: Two digit serial number

[1] A new edition is under consideration.

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5 Plastic moulded enclosure dimensions

The dimensions in this standard apply to all the completed SMD-devices for frequency control and selection. Only those dimensions are given which meet the requirements of IEC 61240.

6 Lead connections

Recommendations for the lead connections of all completed SMD-devices for frequency control and selection are given in the following individual sheets. Lead connections shall always be given in the detail specification.

7 Plastic moulded enclosures

The following table sets out the designation of the plastic moulded enclosures as outlined in the ensuing specification sheets.

Table 1 – Designation of plastic moulded enclosures

No.	Type	Sheet No.	Description
1	DCC-J4/01	Sheet 1	Plastic, moulded, four folded leads SMD outline
2	DCC-J4/02	Sheet 2	Plastic, moulded, four folded leads SMD outline
3	DCC-J4/03	Sheet 3	Plastic, moulded, four folded leads SMD outline
4	DCC-J4/04	Sheet 4	Plastic, moulded, four folded leads SMD outline
5	DCC-J4/05	Sheet 5	Plastic, moulded, four folded leads SMD outline
6	DCC-J4/06	Sheet 6	Plastic, moulded, four folded leads SMD outline
7	DCC-J4/07	Sheet 7	Plastic, moulded, four folded leads SMD outline
8	DCC-J4/08	Sheet 8	Plastic, moulded, four folded leads SMD outline

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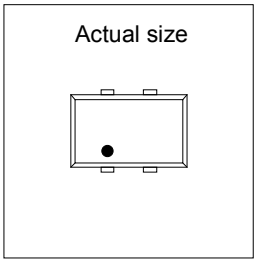
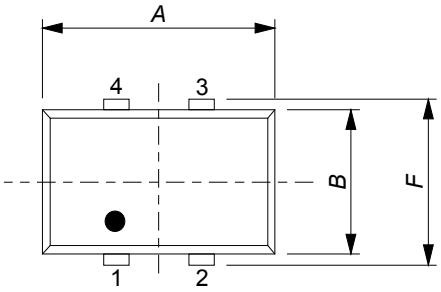
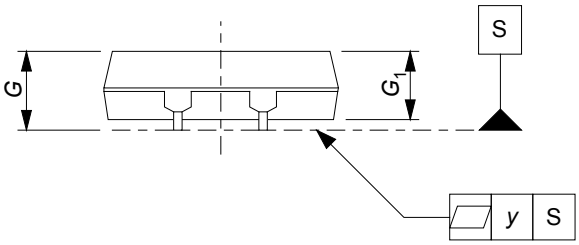
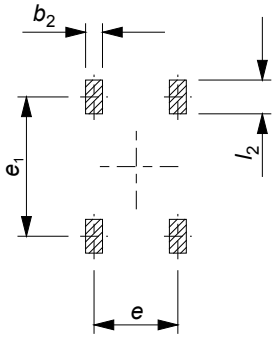


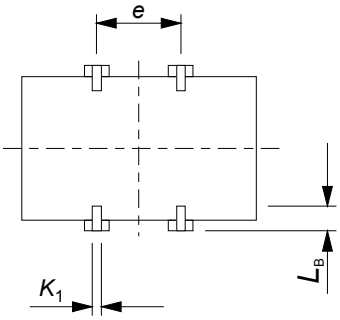
Ref.	Dimensions (mm)			Notes
	Min.	Nom.	Max.	
A			14,00	
B			8,90	
G			4,70	
G_1			4,20	
K_1	0,40		0,60	
K_2	0,20		0,30	
F	9,40		9,80	
L_B	1,70		2,10	
e		5,08		
e_1		7,62		
b_2			0,80	
l_2			2,30	
y			0,10	
A_3		0,30		
b_p	0,40		0,60	
L_p	1,00		1,60	



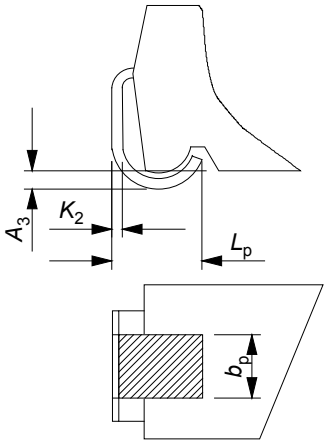


Terminal land areas





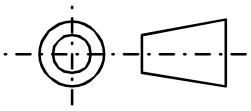
Terminal configuration



IEC 519/12

Plastic, moulded, four folded leads SMD outline, type DCC-J4/01

Scale 2:1



Sheet 1

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Terminal lead connections

If the presence of any leads is optional, or if an enclosure is supplied with less than the maximum number of leads, this shall be indicated in the detail specification.

Type of SMD	Lead No.	Crystal unit	Crystal oscillator	Crystal filter
DCC-J4/01	1		Control voltage	
	2		Ground	
	3		Output	
	4		DC supply	

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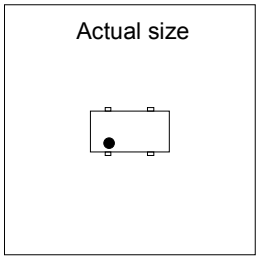

Ref.	Dimensions (mm)			Notes
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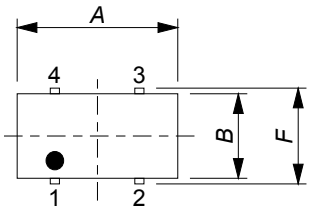
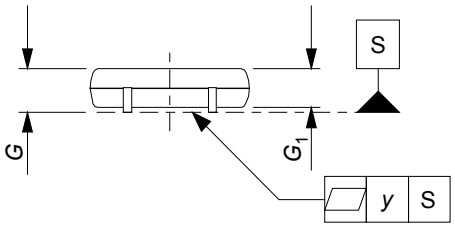
A			10,50	
B			5,30	
G			2,70	
G_1			2,50	
K_1	0,40		0,60	
K_2	0,15		0,25	
F			5,80	
L_B	0,80		1,20	
e		5,08		
e_1		4,60		
b_2			0,80	
l_2			1,40	
y			0,10	
A_3		0,20		
b_p	0,40		0,60	
L_p	0,60		1,20	





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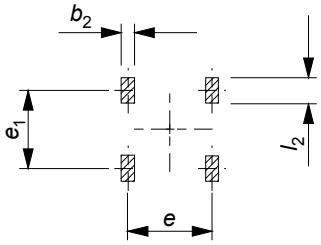
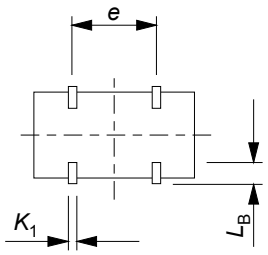
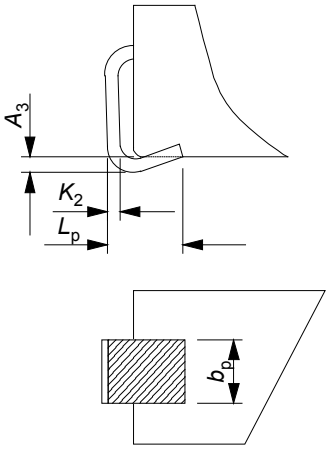
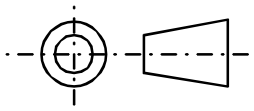




Terminal configuration



IEC 520/12

Plastic, moulded, four folded leads SMD outline, type DCC-J4/02	Scale 2:1	

Sheet 2

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Terminal lead connections

If the presence of any leads is optional, or if an enclosure is supplied with less than the maximum number of leads, this shall be indicated in the detail specification.

Type of SMD	Lead No.	Crystal unit	Crystal oscillator	Crystal filter
DCC-J4/02	1		Control voltage	
	2		Ground	
	3		Output	
	4		DC supply	

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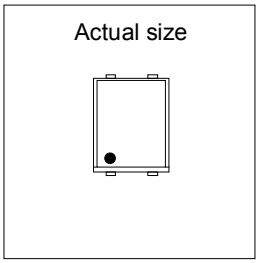

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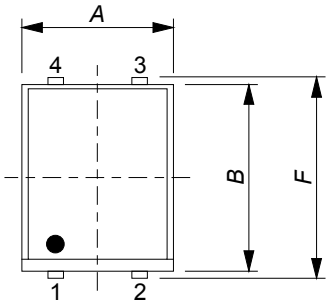
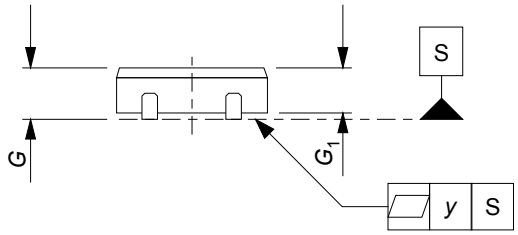
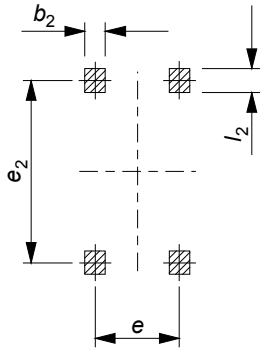
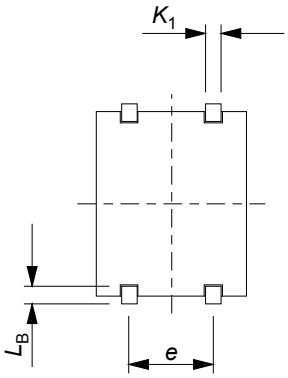
B			11,20	
G			3,00	
G_1			2,80	
K_1	0,80		1,10	
K_2	0,20		0,35	
F			12,00	
L_B	0,90		1,20	
e		5,08		
e_2		10,70		
b_2			1,30	
l_2			1,40	
y			0,10	
A_3		0,30		
b_p	0,80		1,10	
L_p	0,80		1,10	



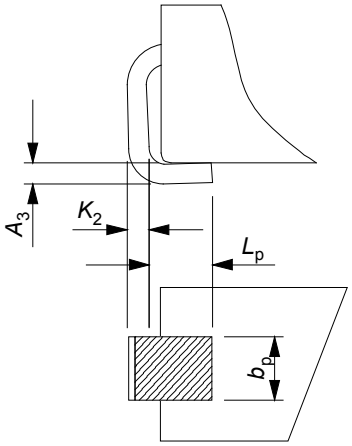


Terminal land areas

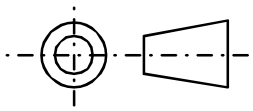




Terminal configuration



IEC 521/12

Plastic, moulded, four folded leads SMD outline, type DCC-J4/03	Scale 2:1	
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Terminal lead connections

If the presence of any leads is optional, or if an enclosure is supplied with less than the maximum number of leads, this shall be indicated in the detail specification.

Type of SMD	Lead No.	Crystal unit	Crystal oscillator	Crystal filter
DCC-J4/03	1	Terminal 1	Control voltage	
	2	NC	Ground	
	3	NC	Output	
	4	Terminal 2	DC supply	

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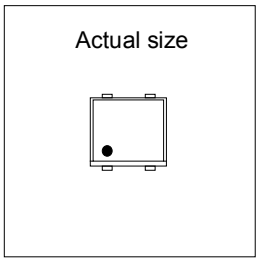

Ref.	Dimensions (mm)			Notes
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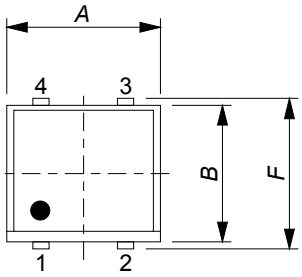
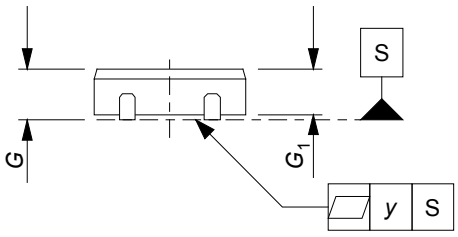
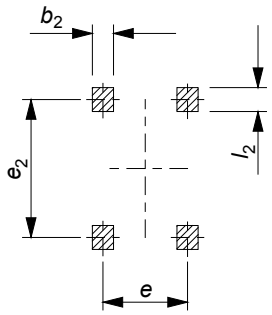
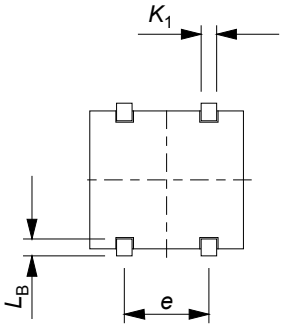
B			8,20	
G			3,00	
G_1			2,80	
K_1	0,80		1,10	
K_2	0,20		0,35	
F			10,00	
L_B	0,90		1,20	
e		5,08		
e_2		8,70		
b_2			1,30	
l_2			1,40	
y			0,10	
A_3		0,30		
b_p	0,80		1,10	
L_p	0,80		1,10	



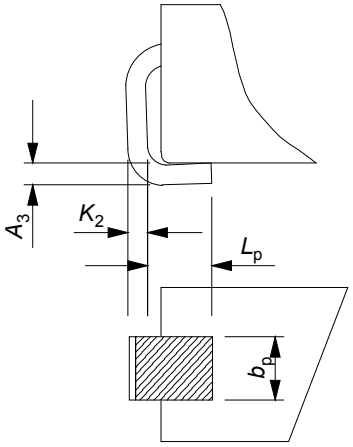


Terminal land areas





Terminal configuration



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Plastic, moulded, four folded leads SMD outline, type DCC-J4/04	Scale 2:1	
Sheet 4		

Documents
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