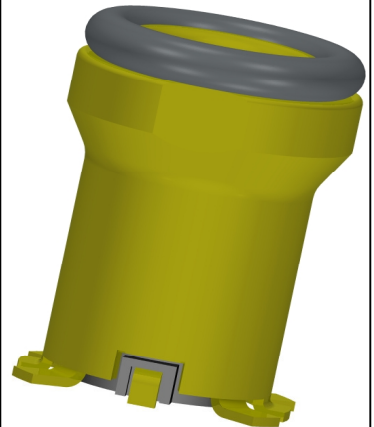


Product data sheet

IMS CONNECTOR SYSTEMS GmbH
 Obere Hauptstrasse 30
 D-79843 Löffingen
 Postfach 1141
 D-79840 Löffingen

Tel (+49) 7654 901-0
 Fax (+49) 7654 901-199
 Net: www.imscs.com
 E-mail: sales@imscs.com

Part Number: 4546.99.0030.00'	Revision: b
Description: SMT-Switch	Date: 22.09.2008
	Signature: KF
	Page: 1 of 4

ELECTRICAL CHARACTERISTICS		colored value means: still under test target value		Unit	
		value			
Impedance (MIL-C-39012B)		50		[Ohm]	
Counter part:		K-2571			
Operation frequency		4		[GHz]	
		unswitched	switched		Remarks Attention: electrical values strongly depending on layout ! Reference-pcb: AGK-4001 after SMT-process / conditioning
Return loss	1GHz	> 30	> 24	[dB]	
	2GHz	> 27	> 20	[dB]	
	3GHz	> 27	> 18	[dB]	
	4GHz	> 27	> 18	[dB]	
Insertion loss	1GHz	< 0,1	< 0,15	[dB]	
	2GHz	< 0,13	< 0,20	[dB]	
	3GHz	< 0,18	< 0,25	[dB]	
	4GHz	< 0,22	< 0,3	[dB]	
Isolation:	1GHz	n/a	> 36	[dB]	
	2GHz	n/a	> 30	[dB]	
	3GHz	n/a	> 27	[dB]	
	4GHz	n/a	> 24	[dB]	
Contact resistance	Center contact	< 80	< 80	[mOhm]	
	Outer contact	< 50	< 50	[mOhm]	
Insulation resistance - initial > 0,50 Gohm		> 1		[GOhm]	
Rated voltage		150		[Vrms]	
Proof voltage / withstand voltage		500		[Vrms]	
MECHANICAL CHARACTERISTICS		Value		Unit	Remarks
Engagement force		10 max		N	after soldering process
Mating cycles		20.000		-	with 4449.91.1420.01'
Water-tight		IP 67			

Product data sheet

IMS CONNECTOR SYSTEMS GmbH
 Obere Hauptstrasse 30
 D-79843 Löffingen
 Postfach 1141
 D-79840 Löffingen

Tel (+49) 7654 901-0
 Fax (+49) 7654 901-199
 Net: www.imscs.com
 E-mail: sales@imscs.com

Part Number: 4546.99.0030.00'	Revision: b
Description: SMT-Switch	Date: 22.09.2008
	Signature: KF
	Page: 2 of 4

<u>MATERIAL AND PLATING</u>			
Housing	Material	Plating	
Innercontact	brass	Ni + 0,2µm Au	
Insulator	bronze	Ni + 0,2µm Au	
Insulator	PPA	-	
Seal	Peek		
Spring	silicon		
	copper beryllium	Ni + 0,5µm Au	
<u>ENVIROMENTAL</u>			
Temperature range		-40°C to +100°C	
Storage temperature		-10°C to +40°C	
Storage humidity		15% to 85% RH	
Temperature change	IEC 60068-2-14 / Nb		
Damp heat cyclic	IEC 60068-2-30 / Db		
Vibration-broad band random	IEC 60068-2-64 / Fh		
Shock	IEC 60068-2-27 / Ea	60 g	
Bump	IEC 60068-2-29 / Eb	40 g	

Notes

<u>Update historie</u>		
Rev.	date	Signature
a	26.01.2009	C.MB
b	08.04.2009	C.MB

Product data sheet

IMS CONNECTOR SYSTEMS GmbH
 Obere Hauptstrasse 30
 D-79843 Löffingen
 Postfach 1141
 D-79840 Löffingen

Tel (+49) 7654 901-0
 Fax (+49) 7654 901-199
 Net: www.imscs.com
 E-mail: sales@imscs.com

Part Number: 4546.99.0030.00'

Revision: b b

Description: SMT-Switch

Date: 22.09.2008

Signature: KF

Page: 3 of 4

SMD - solderability acc. IPC/JEDEC J-STD-020C - Pb-Free Assembly

Table 4-1 SnPb Eutectic Process – Package Peak Reflow Temperatures

Package Thickness	Volume mm ³ <350	Volume mm ³ ≥ 350
<2.5 mm	240 +0/-5 °C	225 +0/-5 °C
≥ 2.5 mm	225 +0/-5 °C	225 +0/-5 °C

Table 4-2 Pb-free Process – Package Classification Reflow Temperatures

Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6 mm	260 +0 °C *	260 +0 °C *	260 +0 °C *
1.6 mm - 2.5 mm	260 +0 °C *	250 +0 °C *	245 +0 °C *
≥2.5 mm	250 +0 °C *	245 +0 °C *	245 +0 °C *

* Tolerance: The device manufacturer/supplier shall assure process compatibility up to and including the stated classification temperature (this means Peak reflow temperature +0 °C. For example 260 °C+0°C) at the rated MSL level.

Table 5-2 Classification Reflow Profiles

Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Average Ramp-Up Rate (T _{Smax} to T _p)	3 °C/second max.	3° C/second max.
Preheat - Temperature Min (T _{Smin}) - Temperature Max (T _{Smax}) - Time (t _{Smin} to t _{Smax})	100 °C 150 °C 60-120 seconds	150 °C 200 °C 60-180 seconds
Time maintained above: - Temperature (T _L) - Time (t _L)	183 °C 60-150 seconds	217 °C 60-150 seconds
Peak/Classification Temperature (T _p)	See Table 4.1	See Table 4.2
Time within 5 °C of actual Peak Temperature (t _p)	10-30 seconds	20-40 seconds
Ramp-Down Rate	6 °C/second max.	6 °C/second max.
Time 25 °C to Peak Temperature	6 minutes max.	8 minutes max.

Note 1: All temperatures refer to topside of the package, measured on the package body surface.

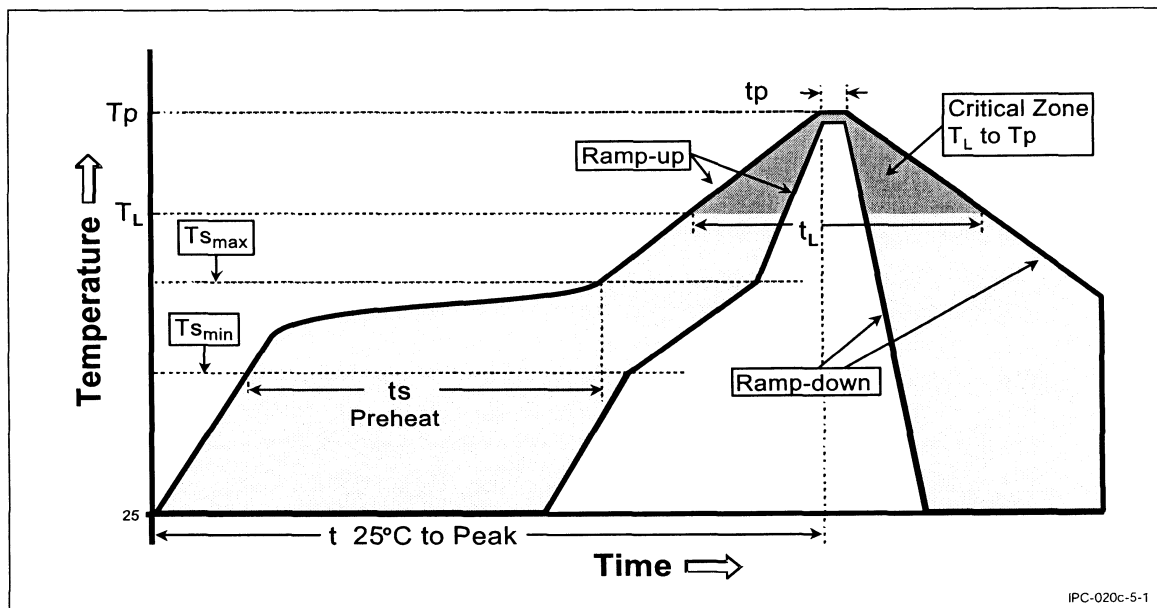


Figure 5-1 Classification Reflow Profile

Product data sheet

IMS CONNECTOR SYSTEMS GmbH
 Obere Hauptstrasse 30
 D-79843 Löffingen
 Postfach 1141
 D-79840 Löffingen

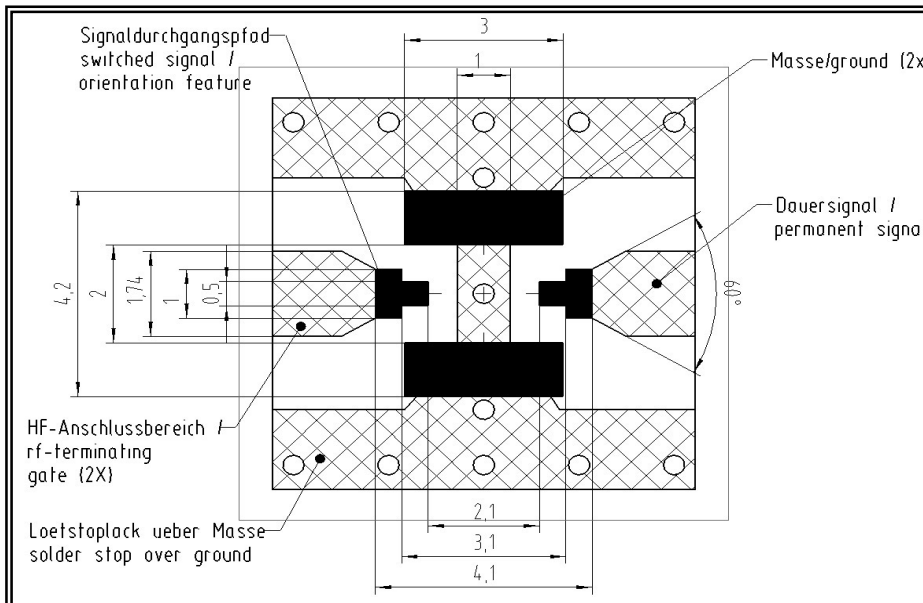
Tel (+49) 7654 901-0
 Fax (+49) 7654 901-199
 Net: www.imscs.com
 E-mail: sales@imscs.com

Part Number: 4546.99.0030.00'

Description: SMT-Switch

Revision: b
 Date: 22.09.2008
 Signature: KF
 Page: 4 of 4

PCB-Layout



Standard pattern dimensions

Please design I/O pattern so that the impedance match 50 ohm including the land pattern.

The material of PCB is the epoxy resin of grass fabric base. ($\epsilon_r = 4.8$). Thickness is 1.0 mm.

The solder resist should be printed except for the land pattern on the PCB.

The standard solder cream metal mask drawing (Mask thickness 0,15 mm)

