

**Product Data Sheet / Produkt Datenblatt**

<b>Part Number</b>	<b>5804.99.0030.003</b>	<b>Teilenummer</b>
<b>Description</b>	<b>SMT-Schalter SMT-Switch</b>	<b>Beschreibung</b>
		
<b>Design according to</b>		<b>Ausführung nach</b>

**Electrical characteristics / Elektrische Eigenschaften**

		colored value means: under validation		Unit/ Einheit	Remarks: Attention electrical values strongly depending on layout. Reference-pcb: AGK-4001
		Value/Wert			
Impedance (MIL-C-39012B)		50		[Ω]	Impedanz (MIL-C-39012B)
Operating frequency up to		4		[GHz]	Betriebsfrequenz bis zu
Return loss	1 GHz	unswitched	switched		Rückflusssdämpfung
	2 GHz	< 30	< 25	[dB]	
	3 GHz	< 24	< 16	[dB]	
	4 GHz	< 24	< 14	[dB]	
Insertion loss	1 GHz	< 0,1	< 0,15	[dB]	Einfügedämpfung
	2 GHz	< 0,13	< 0,20	[dB]	
	3 GHz	< 0,18	< 0,25	[dB]	
	4 GHz	< 0,22	< 0,3	[dB]	
Isolation	1 GHz	n/a	> 36	[dB]	Isolierung
	2 GHz	n/a	> 30	[dB]	
	3 GHz	n/a	> 27	[dB]	
	4 GHz	n/a	> 24	[dB]	
Contact resistance					Kontakt-Widerstand
Centre contact		< 80	< 80	[mΩ]	Innenkontakt
Outer contact		< 50	< 50	[mΩ]	Außenkontakt
Insulation resistance - initial >0,50 [GΩ]	after SMT-process / conditioning	> 1		[GΩ]	Isolationswiderstand
Rated voltage		150		[V] DC	Nennspannung
Proof voltage		500		[V] eff	Prüfspannung

**Mechanical characteristics / Mechanische Eigenschaften**

		Value/ Wert	Unit/ Einheit	
Force necessary for operation	after soldering process	5	[N]	Erforderliche Steckkraft für den Betrieb
Max. allowed force put on center pin	after soldering process	12	[N]	Max. zulässige Kraft auf Kontaktstift
Mating cycles	with 4449.93.8914.1''	≥ 20000		Steckzyklen

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**Material & plating / Material & Oberfläche**

	Material/Material	Plating/Oberflächen	
Outer contact	Brass	Ni-P + 0,15µm Au	Außenkontakt
Centre contact	Bronze	Ni-P + 0,15µm Au	Innenkontakt
Spring	Copper berylium	Ni + 0,5µm Au	Feder
Insulator	PPA		Isolator
Insulator	PEEK		Isolator
Seal	-		Dichtring

**Environmental influences**

**Umwelteinflüsse**

Temperature range	-40°C up to +85°C	Temperaturbereich
Vibration	MIL-STD-202 Meth. 204, cond.B	Vibration
Corrosion resistance	MIL-STD-202 Meth. 101, cond.C	Korrosionsbeständigkeit
Climatic categorie	IEC 60068 40/85/21	Klimakategorie
Shock	MIL-STD-202 Meth. 213, cond. G	Schock
Max. soldering temp. (PCB connectors)	IEC 61760-1, +260°C for 10 sec.	Max. Löttemp. (Leiterplattenanschlüsse)
RoHS	compliant	RoHS
Solder profile	JEDEC J-STD-020E	Lötprofil

**Notes**

**Aufzeichnungen**

**Rev. a: Return loss, Insertion loss, Isolation values validated, Force values updated (bgréczi)**

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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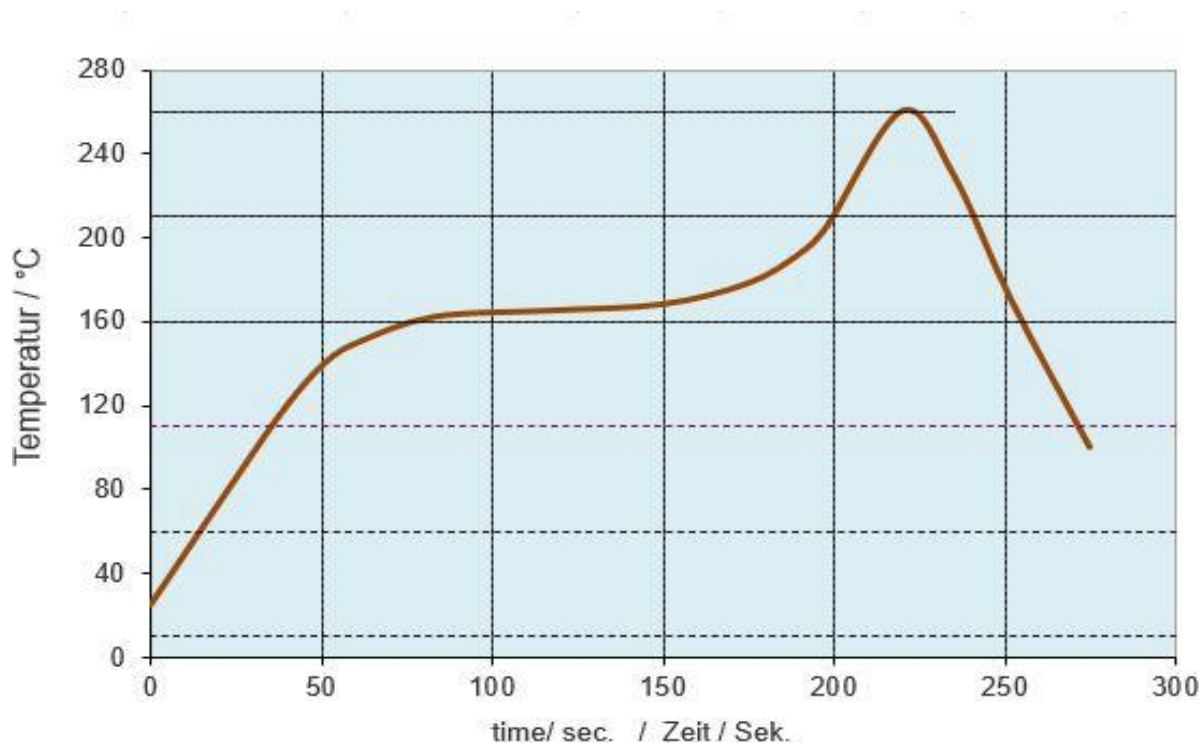
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**Soldering process / Lötprozess**

**Soldering methode / Lötmethode:** THR / Reflow

**Recommended reflow soldering profil /  
 Empfohlenes reflow Lötprofil:**

Parameter	Reference	Specification
Max. Temperature (lead free soldering) Max. Temperatur (bleifreies Löten)	C°	260°



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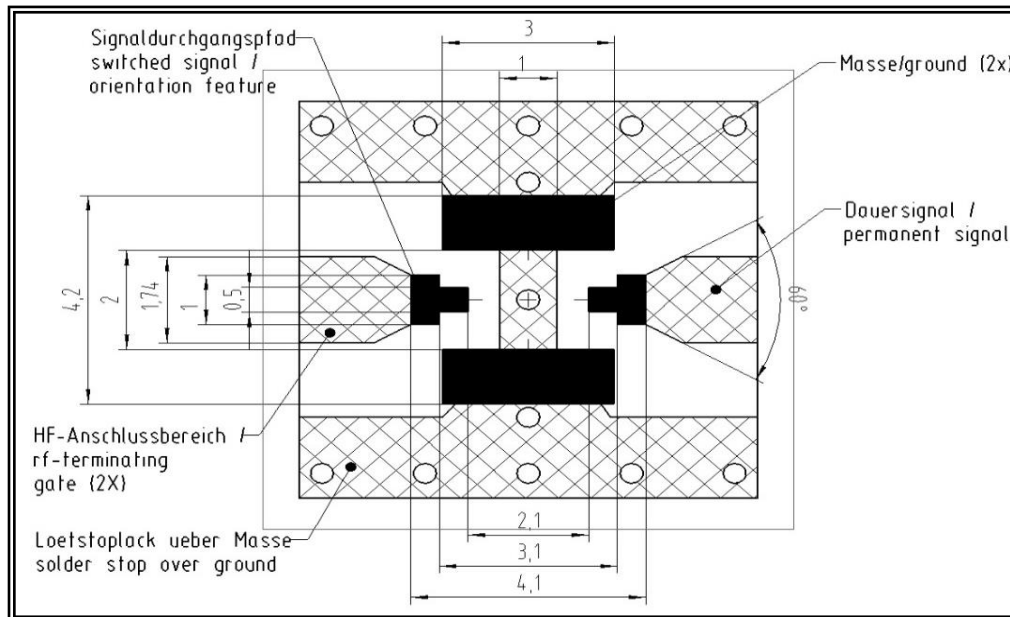
**Teilenummer**

**Description**

**SMT-Schalter  
 SMT-Switch**

**Beschreibung**

**PCB -Layout**



LAND



ELECTRODE

**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. ( $\epsilon_p = 4.8$ ). Thickness is 1.0 mm.

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

