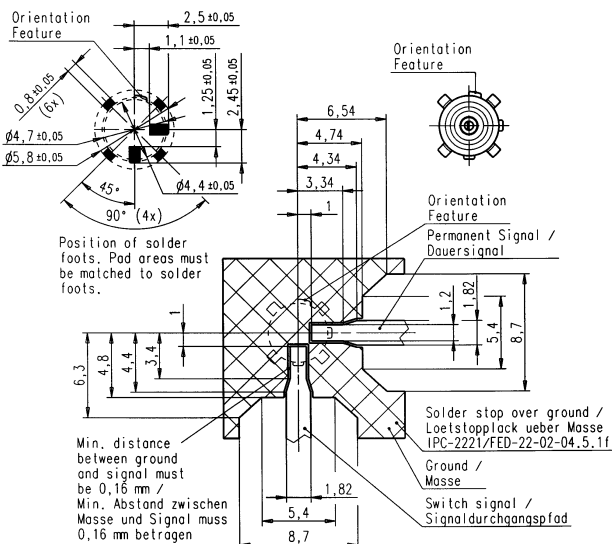


SWITCH

2795.99.0030.00'

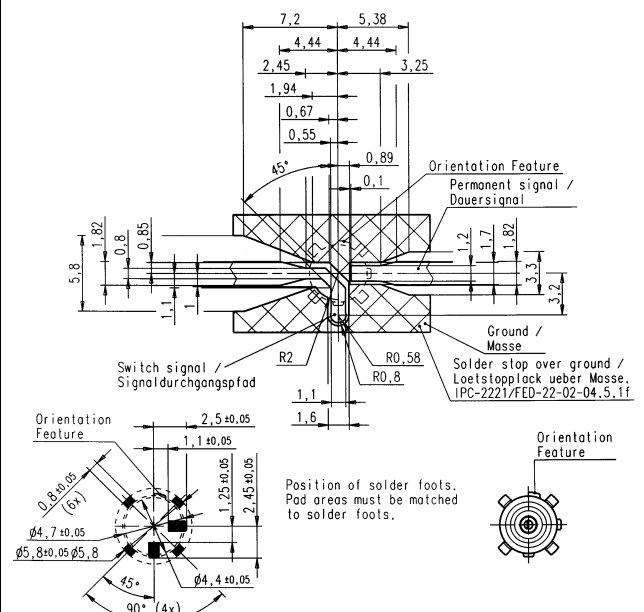
ELECTRICAL CHARACTERISTICS	Unswitched		Switched		Unit
	Layout 1	Layout 2	Layout 1	Layout 2	
Impedance (MIL-C-39012B) : Counter part: 2796.93.1420.00'	50	50	50	50	[Ω]
Operating frequency :	DC..3	DC..3	DC..3	DC..3	[GHz]
Return loss :					
≤ 1 GHz	> 34	> 32	> 33	> 34	[dB]
≤ 2 GHz	> 23	> 25	> 24	> 23	[dB]
≤ 3 GHz	> 23	> 23	> 23	> 20	[dB]
Isolation :					
≤ 1 GHz	-	-	> 34	> 33	[dB]
≤ 2 GHz	-	-	> 28	> 27	[dB]
≤ 3 GHz	-	-	> 23	> 23	[dB]
Insertion loss :					
1 GHz	< 0,15	< 0,15	< 0,20	< 0,20	[dB]
2 GHz	< 0,20	< 0,20	< 0,25	< 0,25	[dB]
3 GHz	< 0,25	< 0,25	< 0,30	< 0,30	[dB]
Insulation resistance :	>500	>500	-	-	[MΩ]
Contact resistance :					
Center contact	< 80	< 80	< 50	< 50	[mΩ]
Outer contact	< 50	< 50	< 25	< 25	[mΩ]
Contact current max. :	0,3	-	-	-	[A]
Operating voltage :	50	50	50	50	[V]
Proof voltage :	100	100	100	100	[V]

Layout 1 - 90° - top view - proposal



All lines should be matched to 50 Ohm.

Layout 2 - 180° - top view - proposal



All lines should be matched to 50 Ohm.

Connector interface:	Switch	Date:	29.10.99
Connector No.:	2795.99.0030.00'	Designer:	Zech
Revision:	k	Page:	1 / 4

SWITCH**2795.99.0030.00'****MECHANICAL CHARACTERISTICS**

Engagement force	typ. 2-4 N	[N]	(with mating connector 2796.93.1420.0'')
Separating force	typ. 0	[N]	(with mating connector 2796.93.1420.0'')
Mating cycles	-	-	see wearing off test
Contact pressure force (switch)	typ. 0,20	[N]	(only switch, spring contact)

MATERIAL & PLATING

	Material	Plating
Housing	DIN 1791-0,2	2-4ym Ni & min. 0,2ym Au
Insulator	PA	-
Center contact	CuBe2/CuSn6	2-4ym Ni & min. 0,2ym / min. 0,4ym Au
Other metal parts	-	-

ENVIROMENTAL

Low temperature storage	IEC 60068-2-1 / Ab	-40°C / 72 h
High temperature storage	IEC 60068-2-2 / Bb	+85°C / 72 h
Temperature change	IEC 60068-2-14 / Nb	
Damp heat, cyclic	IEC 60068-2-30 / Dp	
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

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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.

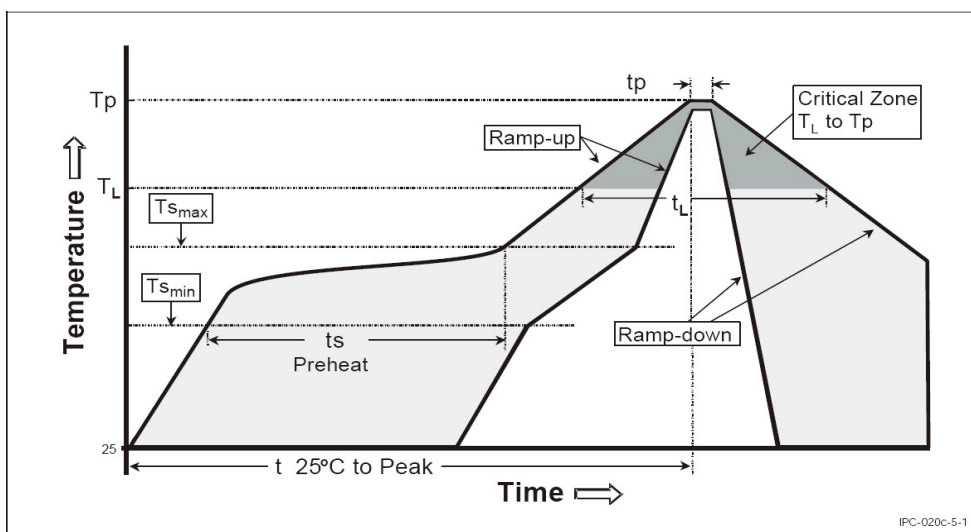
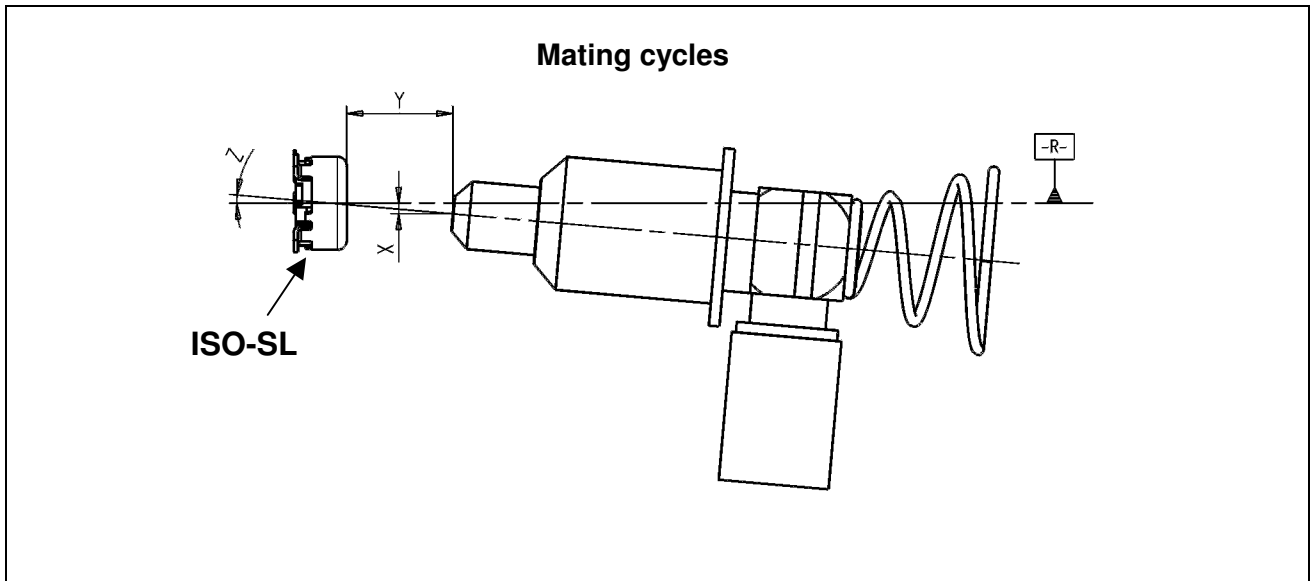


Figure 5-1 Classification Reflow Profile

Connector interface:	Switch	Date:	29.10.99
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Revision:	k	Page:	3 / 4

Wearing off test



	ISO-VA	Misalignment X [mm]	Cycl.-distance Y [mm]	Angel of deviation Z	Cycle time [sec.]	Cycles
	Contact spring horizontal	0,50	15	5°	2	10.000
		0,50	15	2°	2	15.000
	ISO-VA	Misalignment X [mm]	Cycl.-distance Y [mm]	Angel of deviation Z	Cycle time [sec.]	Cycles
	Contact spring vertical	0,50	15	5°	2	20.000
		0,50	15	2°	2	20.000

Note:

1 Cycle = mate and disconnect connector once.

Min. cycle time 2 sec.

Connector interface:	Switch	Date:	29.10.99
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