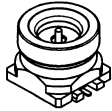


Description	Part Number	Picture
Switch	2984.99.0030.00'	

<u>ELECTRICAL CHARACTERISTICS</u>	unswitched	switched values included adapter 3115.49.8910.10'	Unit
Impedance (MIL-C-39012B) Operating frequency Isolation - 1 / 2 GHz	50 DC-2 > 30 / > 23	50 DC-2 -	[Ω] [GHz] [dB]
Return loss			
1 GHz	> 24	> 22	[dB]
2 GHz	> 19	> 20	[dB]
3 GHz	-	-	[dB]
Insertion loss			
1 GHz	< 0,12	< 0,20	[dB]
2 GHz	< 0,16	< 0,60	[dB]
3 GHz	-	-	[dB]
Contact resistance			
Center contact	< 80	< 30	[m Ω]
Outer contact	< 5	< 5	[m Ω]
Insulation resistance	> 500	> 500	[M Ω]
Operating voltage	100	100	[V]
Proof voltage	500	500	[V]
Electro static discharge (ESD)	protected	-	

MECHANICAL CHARACTERISTICS

	value	Unit	Remarks
Engagement force	2	[N]	With mating connector 2613.93.1420.03'.
Separating force	1	[N]	
Mating cycles	20000	-	Only switch, spring contact.
Contact pressure force (switch)	typ. 0,20	[N]	

MATERIAL & PLATING

	Material	Plating
Housing	GD-ZnAl4Cu1	Optalloy & Flash Au
Insulator	PA46	-
Contact springs	CuSn6 / CuBe2	Au over Ni
Other metal parts	CuZn39	Tribor or Au over Ni

Designer :	Zech	Filename :	G:\Konstruktion\Konstruktionsdatenblätter\Spezifikationen\Mobile Produktspezifikationen\2984_spec.doc
Date :	22.11.01	Remarks:	
Page :	1 / 3		

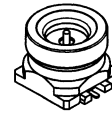
Description

Switch

Part Number

2984.99.0030.00'

Picture

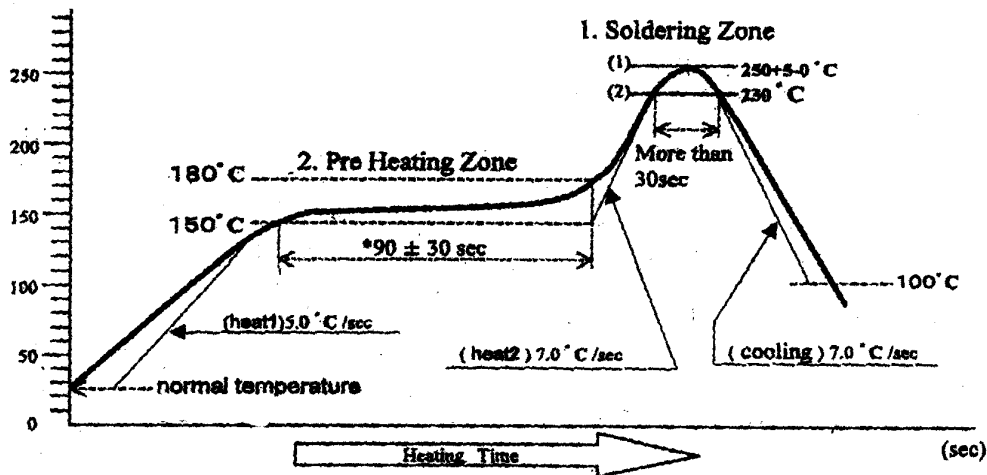


ENVIROMENTAL

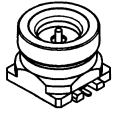
	Standard	Remarks
1. Working temperature range	-40°C up to +165 °C	
2. Moisture resistance	MIL-STD-202	10 cycles
3. Relative humidity	5 – 95 %	
4. Thermal cycling	-40°C up to +125°C	MIL-STD-202
5. Shock	MIL-STD-202	
6. Vibration	MIL-STD-202	
7. Corrosion	MIL-STD-202	
8. Sealing-interface	-	

SMD-solderability

Recommended reflow soldering profile, but no manual hot gas soldering or soldering by using the soldering iron is allowed – Peak temperature: 250°C.



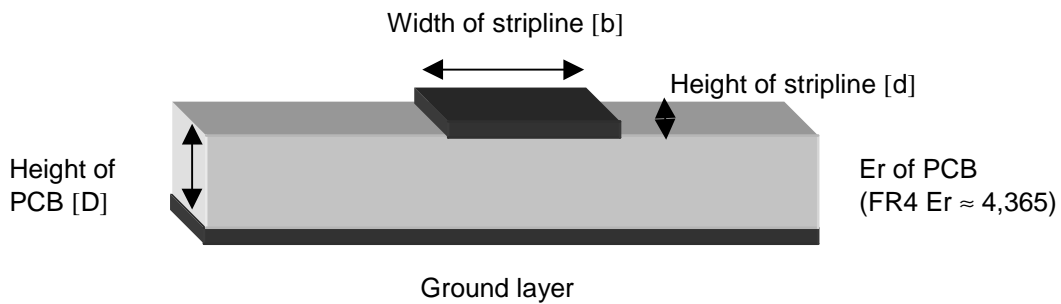
Designer :	Zech	Filename :	G:\Konstruktion\Konstruktionsdatenblätter\Spezifikationen\Mobile Produktspezifikationen\2984_spec.doc
Date :	22.11.01	Remarks:	
Page :	2 / 3		

IMS CONNECTOR SYSTEMS	DATASHEET	Rev. c 06.06.02
Description Switch	Part Number 2984.99.0030.00'	Picture 

Matching of PCB-Layout

For optimal performance you have to secure that all signal lines are matched well. We recommend to use a stripline matched to the impedance of the connector/switch. A stripline is calculated with the following factors :

1. Width of stripline [b]
2. Height of PCB (Distance to GND Layer) [D]
3. Height of Stripline [d]
4. Dielectric Constant [Er] of the PCB Material



Calculation of the impedance :

$$Z \approx \frac{75}{\sqrt{\epsilon r}} \ln^* \left(\frac{6 * D}{0.75 * b + d} + \frac{0,075 * b}{D} \right)$$

This is only a roughly calculation. There are more precision equation available for stripline calculations in literature.

Designer :	Zech	Filename :	G:\Konstruktion\Konstruktionsdatenblätter\Spezifikationen\Mobile Produktspezifikationen\2984_spec.doc
Date :	22.11.01	Remarks:	
Page :	3 / 3		