



1、产品特征描述 Product Feature Description:

MBM 系列产品是参照美军标 MIL-C-39012/16-24 研制生产的一种快插、盲配、大功率、大容差射频同轴连接器，与国际同类产品有相同的应用场景。它具有连接器迅速、接触可靠等特点，广泛地应用于民用基站，军用雷达等通讯设备中。

MBM series of products is a reference to the US military standard MIL-C-39012 / 16-24 development and production of a fast insert, blind with, high-power, large-capacity RF coaxial connector, with similar products in the international application of the same scene. It has a fast connector, reliable contact and other characteristics, widely used in civilian base stations, military radar and other communications equipment.

2、MBM 系列连接器主要技术参数

MBM series connector main technical parameters

执行标准:GB11315 executive standard: GB11315		
民品 civilian goods	通用规范 General specification	GJB 680 《射频同轴连接器转接器通用规范》(MIL-PRF-55339) GJB 680 《general specification for rf coaxial connector adapter》(MIL - PRF - 55339)
		GJB 681 《射频同轴连接器通用规范》(MIL-PRF-39012) GJB 681 《rf coaxial connector general specification》(MIL - PRF - 39012)
		GJB 976 《同轴、带状线或微带传输线用射频同轴连接器通用规范》 (MIL-DTL-83517) GJB 976 《coaxial, stripline and microstrip transmission line with rf coaxial connector general specification》(MIL - DTL - 83517)
	系列分规范 Series points specification	/
军品 Military goods	通用规范 General specification	GB/T 11313.1 《射频连接器 第1部分: 总规范 一般要求和试验方法》(IEC 61169-1) GB / T 11313.1 《RF connectors Part 1: General specification General requirements and test methods》(IEC 61169-1)
	系列分规范 Series points specification	Q/FD 21006 《MBM 系列民用射频同轴连接器分规范》 Q / FD 21006 《MBM series of civil radio frequency coaxial connector sub-standard》
产品界面 Product interface		/
额定值 rated value		



工作频率 (GHz) operating frequency (GHz)	DC~10GHz	
标称阻抗 (Ω) Nominal resistance (Ω)	50 Ω	
温度范围 (°C) Temperature range (°C)	-65 °C ~ + 165 °C	
电气性能 Electrical properties		
绝缘电阻 Insulation resistance (M Ω)	≥5 G Ω	
电压驻波比 (VSWR) Pattern voltage standing wave	≤ 1.30@DC-6GHz (三件套, 典型值) ((Three-piece, typical value))	
射频插入损耗 (dB) Radio frequency insertion loss	≤ 0.3dB max (三件套点长度 27mm, 典型值) (Three-piece set length of 27mm, typical value)	
接触电阻 (m Ω) Contact resistance (m Ω)	内导体 Inner conductor	≤ 6.0m Ω (初始值) (Initial value)
	外导体 Outer conductor	≤ 3.0 m Ω (初始值) (Initial value) I
介质耐电压 (V) Dielectric Withstand Voltage (V)	1000 V	
射频高电位电压 (V) Radio frequency high voltage resistance (V)	f: 5~7.5MHz 1000 V min	
射频泄漏 RF leakage	在 DC~2.0GHz 频率范围内测量时, 应优于-60dB In the DC ~ 2.0GHz frequency range of measurement, should be better than -60dB	
机械性能 mechanical property		
啮合力和分离力	啮合力 Engagement force	≤9N(光孔端) (Light hole end) ; ≤15N(擒纵端) (Escapement)
	分离力 Separation force	≥2N(光孔端) (Light hole end) ; ≥4N(擒纵端) (Escapement)
连接机构耐力矩 Connection mechanism resistance torque	不涉及	
插合特性 Insertion characteristics	中心接触件 Center contact pieces	0.4n



	外接触件 Outside contact	2.2N
中心接触件的固定性 Fixedness of the center contact		≥10N
连接器的耐久性 The durability of the connector		≥1000次(光孔端) ≥1000 times (Light hole end); 500 次(擒纵端) 500 times (Escapement)
电缆保持力 Cable retention	轴向力 Axial force	177.9N min (非压接装配) (The assembly pressure)
	扭矩 Torque	0.15 Nm
连接机构的保持力 Connection mechanism resistance		不涉及
环境性能 Environmental performance		
盐雾 (腐蚀) Salt spray (corrosion)		GJB 360 方法 101 条件 B(48h) GJB 360 Method 101 Condition B (48h)
高频振动 High frequency vibration		GJB 360 方法 204 条件 B GJB 360 Method 204 Condition B
冲击 (规定脉冲) Impact (specified pulse)		GJB 360 方法 213 条件 I GJB 360 Method 213 Condition I
温度冲击 Temperature impact		GJB 360 方法 107 条件 B GJB 360 Method 107 Condition B
耐湿 Resistant to moisture		GJB 360 方法 106 GJB 360 Method 106
材料 Material		
外导体 Outer conductor	黄铜, 铍青铜 Brass, beryllium bronze	
内导体 Inner conductor	黄铜 (插针) / 锡磷青铜、铍青铜 Brass (pin) / tin phosphor bronze, beryllium	
绝缘介质 Insulation medium	聚四氟乙烯, 聚醚醚酮 Teflon, PEEK	
线夹 Wire clip	不涉及	
密封圈 Sealing ring	硅橡胶 Silicone Rubber	
表面镀层 Surface finishes		
外导体 Outer conductor	镀镍/镀金/镀三元合金 Nickel plated / gold plated / plated ternary alloy	
内导体 Inner conductor	镀镍/镀金 Nickel plated / gold plated	
线夹 Wire clip	不涉及	

3、推荐安装尺寸 Recommended installation dimensions

安装形式 Installation form	推荐安装尺寸 Recommended installation dimensions
四孔开孔尺寸 Four hole opening size	□9.6*9.6/6.2*6.2/0.2 槽
穿墙安装尺寸 Wall mounting dimensions	M8*1.0
表贴安装尺寸 Surface mounting dimensions	5.08*5.08/5*φ1.3

4、推荐安装拆卸工具： It is recommended to install the disassembly tool

no

5、解决方案 solutions

富士达 50 Ω MBM 是大容差、大功率方面一种可靠的连接方案，采用快插盲配连接机制，尤其适用于频率高达 6GHz 的射频连接的多对频繁连接和分离操作。

凭借良好的电气性能，MBM 适用于不同的应用领域。如民用通讯，军用雷达等领域。

Forstar 50 Ω MBM is big tolerance and high power a reliable connection solution, using fast blind mating mechanism, especially suitable for up to 6 GHz frequency rf connection for more frequent connection and separation operation.

With excellent electrical properties, MBM is suitable for different applications. Such as civil communications, military radar, and other fields.

