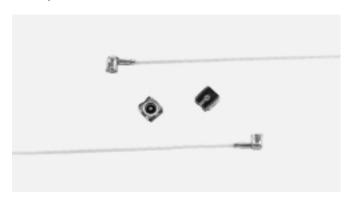
## HIGH FREQUENCY DEVICES COAXIAL CONNECTORS SMT, MICROMINIATURE







#### PART NUMBERING - RECEPTACLE

Part Number	Packaging	Quantity	
MM7329-2700	Bulk package	Specify	
MM7329-2700TB1	178mm Dia. Taping	1000pcs/reel	
MM7329-2700TB2	330mm Dia. Taping	4000pcs/reel	

#### **PART NUMBERING - CABLE ASSEMBLY**



Cable assembly

2 4 Connector code for each end of cable

Code	Connector		
FG	FSC type Plug connector for 76 cable		
FK	FSC type Plug connector for 81 cable		
XX	No connector		

3 Cable code

Code	Cable	Outer Diameter	Outer Conductor Construction	Minimum Bending Radius	Insulation Material
76	0.8D	1.25mm	Single shield	6mm	FEP or PFA
81	0.4D	0.8mm	Single shield	4.8mm	FEP or PFA

• Full length of cable assembly Length L (mm) = • x10•

 $500 \text{mm} = 500 \text{x} 10^{0} = 5000$ 

 $1000 \text{mm} = 100 \text{x} 10^{1} = 1001$ 

#### 66

#### **FEATURES**

- High engagement and high reliability with new structure
- Ultra-miniature for high density mounting (11.6mm²)
- Ultra-low profile (3.0mm max.)
- SMD and reflow solderable
- Tape and reel packaging
- Mountable by automatic placer
- High performance (VSWR: 1.2 max. at 3GHz)
- Available with ultra-thin FEP coaxial cables (0.8mm dia.)

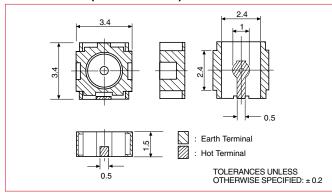
#### **APPLICATIONS**

Portable, mobile and cordless telephone, GPS, any other microwave radio and measurement equipment, high-end workstations

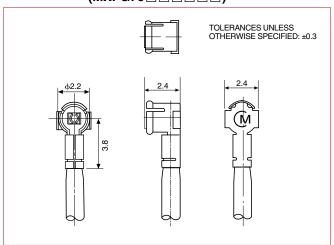
#### **SPECIFICATIONS**

Item	Rating and Characteristics		
Frequency	From DC to 3GHz		
VSWR	1.2 max.		
Nominal Impedance	50Ω		
Temperature Range	-40°C to +90°C		
Voltage	250Vrms		
Contact Resistance	15m $\Omega$ max.		
Withstand Voltage	300VAC rms		
Insulation Resistance	$500$ Μ $\Omega$ min.		
Mating Cycles	50 cycles		

#### DIMENSIONS (MM7329-2700): mm



#### 



318 CG01-J

## HIGH FREQUENCY DEVICES COAXIAL CONNECTORS SMT, MICROMINIATURE



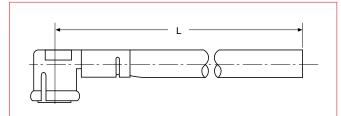
#### MATERIALS AND FINISH MM7329-2700 - RECEPTACLE

Part Name	Materials	Finish	
Center Contact	Copper Alloy	Gold plated	
Outer Contact	Copper Alloy	Gold plated	
Insulator	Engineering Plastic	None	

# MXFK81 - - CONNECTOR MXFG76 - - - CONNECTOR

Part Name	Materials	Finish
Center Contact	Copper Alloy	Gold plated
Outer Contact	Copper Alloy	Gold plated
Insulator	Engineering Plastic	None

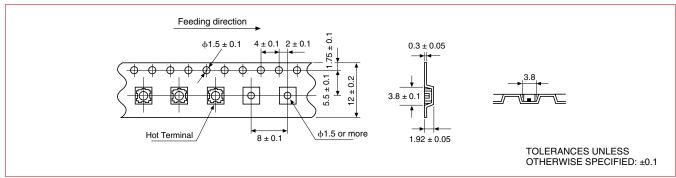
#### **CABLE LENGTH TOLERANCE**



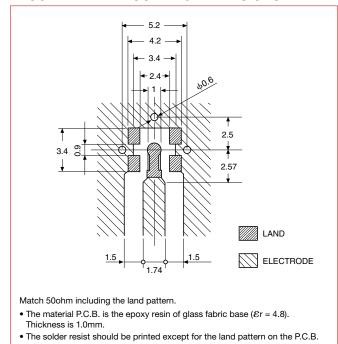
Cable Length L (mm)*		Dimensional	
From	То	Tolerance (mm)	
40	100	± 3	
100	500	± 4	
500	1000	±10	
1000	_	+2% of L -0% of L	

<sup>\*</sup>L must be 40mm min.

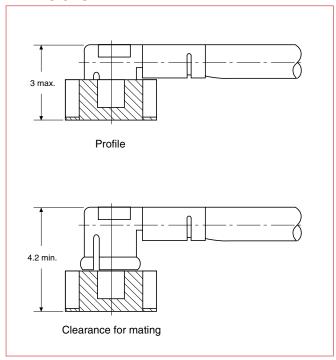
#### **DIMENSIONS OF PLASTIC TAPE: mm**



#### **RECOMMENDED MOUNTING DIMENSIONS: mm**



#### **DIMENSIONS: mm**



CG01-J 319

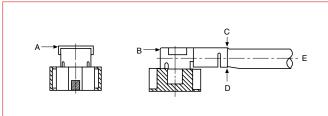
# HIGH FREQUENCY DEVICES COAXIAL CONNECTORS SMT, MICROMINIATURE

# **FSC Series**

#### **APPLICATION NOTES**

- Stress limit to the connector: When connected, stress to the connector should be limited as shown in Fig. 1.
- PCB mounting pattern dimensions: Dimensions shown on page 323 "Recommended Mounting Dimensions" should be used for PCB design.
- Disengagement and engagement: Use tool P/N M19000. The connector to be disengaged and engaged should be pulled out or insert to the vertical direction using the tool. Do not try and pull out the cable by hand or wire breakage may result.
- Cable and connector handling: Do not apply a twisting torque to the cable and connector.
- REFLOW SOLDERING CONDITION: Reflow soldering should be carried out according to condition shown in Fig. 4.

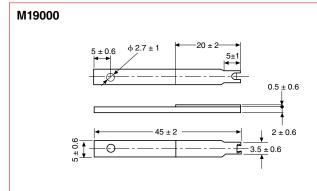
#### STRESS TO THE CONNECTOR (Fig. 1)

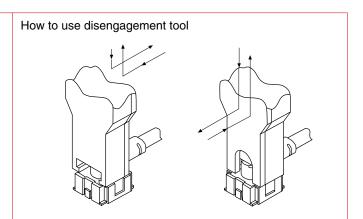


- 1. Stress to the housing. Stress A and B: 4.9N (0.5kgf) max.
- 2. Stress to the outer sleeve. Stress C: 2.94N (0.3kgf) max. Stress D: 1.96N (0.2kgf) max.
- 3. Stress to the cable. Stress E: 4.9N (0.5kgf) max. for 81 cable

7.84N (0.8kgf) max. for 76 cable

#### **DISENGAGEMENT TOOL (Fig. 2): mm**

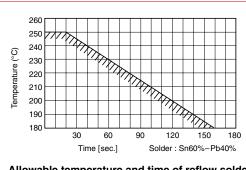




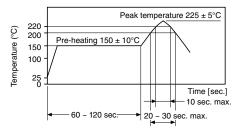
#### SMA-FSC ADAPTERS (Fig. 3): mm

### MM121460 (For FSC type receptacle) 14.06 8.64 5.08 +5.330.76 FSC - MALE 0 ф 5.33 ф 3.1 SMA-JACK MM121454 (For FSC type cable assembly) 13.93 5.08 SMA - JACK FSC - FEMALE 1.33 ф 5.33

### STANDARD REFLOW SOLDERING **CONDITIONS (Fig. 4)**



#### Allowable temperature and time of reflow soldering



- Measuring point of temperature in-out terminals of the device.
- Reflow Soldering
- Both convection and infrared rays
- Hot plate

320 CG01-J

ф 2.16

# HIGH FREQUENCY DEVICES MINIATURE CABLE SPECIFICATIONS



### **SPECIFICATIONS**

	SPECIFICATI	ONS	76	8	31	92
Description		n	0.8D Single shield outer conductor with FEP insulation, based on JIS C 3501	0.4 Single shield outer conductor with FEP insulation, based on JIS C 3501		0.4 Single shield outer conductor PFA cable based on JIS C 3501
	Material	_	Silver-coated copper-covered steel wire	Silver-coated copper-covered steel wire		Silver-coated copper-covered steel wire
Inner conductor	No. and Dia	ı. (No./mm)	1/0.26	7/0.05		1/0.15
	Dia.	(mm)	0.26	0.15		0.15
Insulation	Material	_	FEP	FEP o	r PFA	PFA
	Softening po	int °C (typ.)	285	25	50	302-310
	Dia.	(mm)	0.8	0.	.4	0.43
Outer Conductor –	Material	_	Single braid of tin-coated copper wire	Single braid of tin or silver-coated copper wire		Tin plated copper wire
	Carriers —		16	16	8	8
	Ends —		5	5	3	6
	Dia. of wire	e (mm)	0.05	0.05		0.05
Sheath	Material	_	FEP	FEP or PFA		PFA
Jilbatti	Nominal thic	k. (mm)	0.1	0.05		0.075
Overall Dia.			(mm)	1.25		0.83
Nominal impedance (Ω)		(Ω)	50	50		50
Continuous working voltage		g voltage	300V rms, maximum	300V rms, maximum		300V rms, maximum
Nominal capacitance (pF/m)		(pF/m)	100	100		100
dB/kı		dB/km at 1GHz	1560	3000		2890
Nominal atter		IB/km at 2 GHz	2300	4260		4280
ivonimai attei		dB/km at 3GHz	2900	5240		5390
dB/km		dB/km at 4GHz	3500	6180		6440
Velo	city Factor		2.09 x 10 <sup>8</sup> m/s*	2.09 x 1	08 m/s*	2.09 x 10 <sup>8</sup> m/s*

<sup>\*</sup>Meters per second

CG01-J 321