

MINI-MULTIMATE™



HIGH FREQUENCY MULTIPLE INTERCONNECT SYSTEM



The Mini-MultiMate™ is a compact, rugged, splash-resistant interconnect system that allows multiple high frequency connections (up to 50 GHz) with a single connector.

As an interconnect between a panel or PCB, the Mini-MultiMate's compact size and **utilization of Storm Flex® 086 cable makes it the perfect fit for high density layouts.**

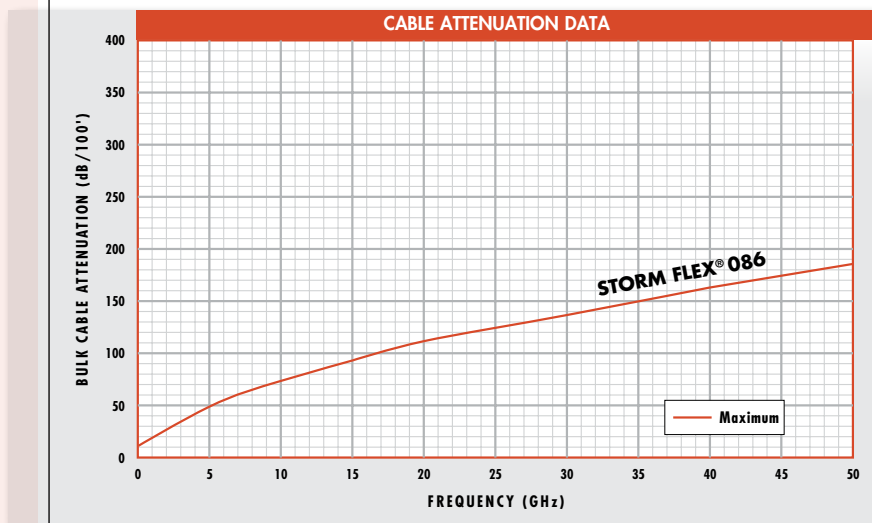
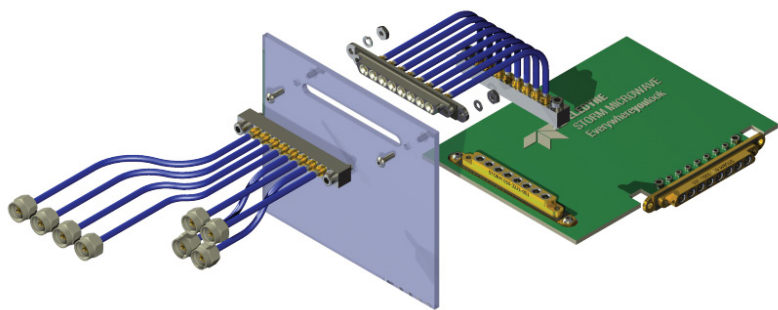
Built to be durable, Storm Flex® 086 cable has the flexibility to handle tight bends and offers superior and consistent electrical performance with flexure.

The Mini-MultiMate™ also accepts 0.086" semi-rigid cable.

Ease-of-use features include port identification on the connector block and the ability to replace individual channel assemblies.

Applications that can benefit from use of the Mini-MultiMate™ include:

- Radar
- Missile Systems
- Electronic Warfare
- Automated Test Equipment



**TELEDYNE
STORM MICROWAVE**
Everywhereyoulook™

High value microwave and
electronic interconnect solutions

www.teledynestorm.com

MATERIALS

Contacts	BODY AND CONTACT:	Beryllium Copper per ASTM B196, C17300, Gold plated per ASTM B488, Type 2, Class 1.27
	LOCKING RING:	Beryllium Copper per ASTM B196, C17300, Gold plated per ASTM B488, Type 2, Class 0.25
	INSULATOR:	Teflon per ASTM D1710, Type 1, Grade 1, Class A or Torlon 4203 per MIL-P-46179
	O-RING:	Silicone Rubber per ASTM per A-A-59588
	LOCKING NUT:	Corrosion resistant steel Per ASTM 582, S30300 Alloy, Passivate per SAE-AMS-2700
Connector Block	HOUSING:	Brass per ASTM B16, C36000 alloy, Nickel plate per SAE-AMS-QQ-N-290 or Gold plated per ASTM B488, Class 0.25
	JACK SCREWS/BUSHING:	Corrosion resistant steel
	GASKET:	Silicone Rubber per ASTM per A-A-59588

ENVIRONMENTAL WHEN MATED WITH STORM FLEX® 086 CABLE

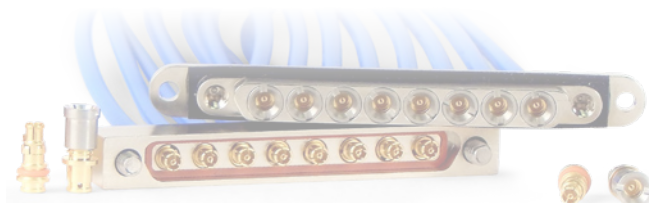
Temperature	-55° C to +125° C
Vibration (High Frequency)	Meets MIL-STD-202, Method 204, Condition D
Shock (Specified Pulse)	Meets MIL-STD-202, Method 213, Test Condition I
Ingress Protection	IEC 60529 IP54 (1.0 mm probe/watersplash)

ELECTRICAL

Nominal Impedance	50 Ohms				
Frequency	DC – 50 GHz				
VSWR (Typical; for full data see website)	Freq. Range GHz	Mated Harness Pair	On Board:	Edge Launch	Vertical Launch
	0 - 9	1.20:1		1.40:1	1.35:1
	9 - 18	1.35:1		1.55:1	1.50:1
	18 - 26.5	1.35:1		1.55:1	1.50:1
	26.5 - 40	1.60:1		1.55:1	2.15:1
	40 - 50	1.60:1		1.70:1	-
Cable Attenuation (Nominal)	0.94 dB/ft @ 18 GHz	1.17 dB/ft @ 26.5 GHz		1.71 dB/ft @ 50 GHz	
DWV (@ sea level)	325 Vrms when tested per MIL-STD-202, Method 301				
Insulation Resistance	5000 Mega Ohms minimum when tested per MIL-STD-202, Method 302, Condition B				
RF Leakage	70 dB thru 18 GHz; 63 dB thru 26.5 GHz; 55 dB thru 40 GHz per MIL-STD-1344, Method 3008 (Mode Stirred)				
Channel to Channel Isolation (Cross Talk)	95 dB min. thru 40 GHz (Testing at other frequencies available on request.)				

MECHANICAL

Storm Flex® 086 Cable Outer Diameter	0.096 inch (Nominal)
Minimum Bend Radius	1.0 inch (Dynamic)
	0.188 inch (Static)
Durability	500 mates (Minimum)
Pull Force	10 lbs (Tensile Load)



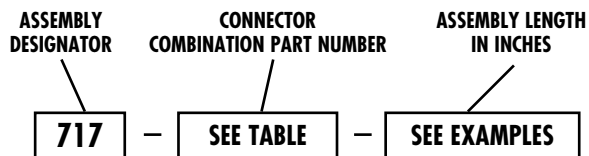
CONNECTOR COMBINATION PART NUMBERS*

	50 GHz	
	8-Position Male	8-Position Female
50 GHz	2.4 mm SP	4081 4080
	8-Position Male	8181 8081
40 GHz	8-Position Female	8081 8080
	2.9 mm SP	3781 3780
26.5 GHz	SMPM SJ	2181 2180
	SMA SP	0381 0380
18 GHz	SSMA SP	3081 3080
	SMA SP	0281 0280
	SMA SJ	0481 0480
	SMP SJ	0681 0680

NOTE: All non-8-position connectors will order x8.
* Other connector styles available; consult Storm

ORDERING INFORMATION: Part Number Designation

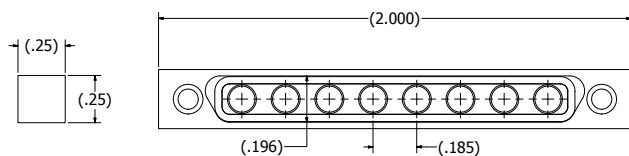
CONNECTOR CODES	
SP	Straight Plug
SJ	Straight Jack



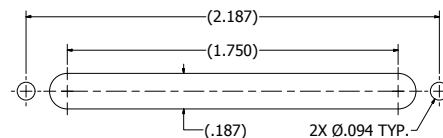
EXAMPLES:

717-4080-009 = Mini-MultiMate™ assembly with Storm Flex® 086 cables, [8] 2.4 mm SP connectors to 8-position female connector (assembly operates to 50 GHz), **9 inches**

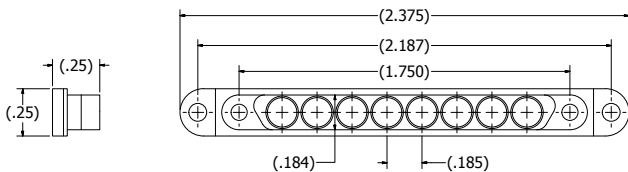
717-3081-018 = Mini-MultiMate™ assembly with Storm Flex® 086 cables, [8] SSMA SP connectors to 8-position male connector (assembly operates to 26.5 GHz), **18 inches**



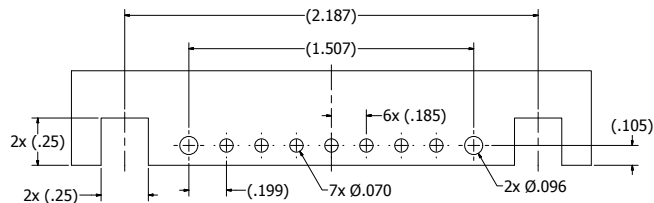
PLUG HOUSING
P/N: 050-3054-001



PANEL CUTOUT

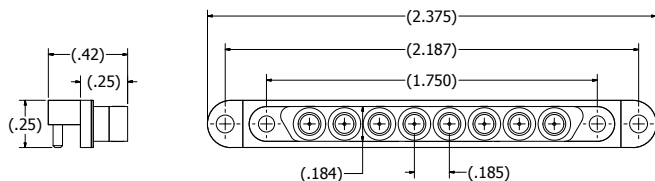


PANEL MOUNT RECEPTACLE
P/N: 050-3055-001

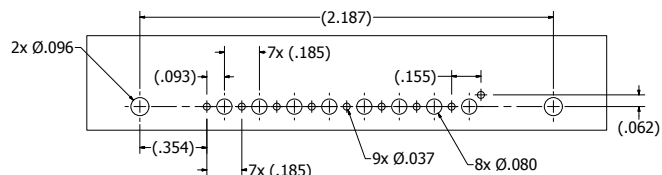


PCB BOARD LAUNCH PAD (Edge Launch)

For complete recommended board specifications, see TSM DWG 710-0605

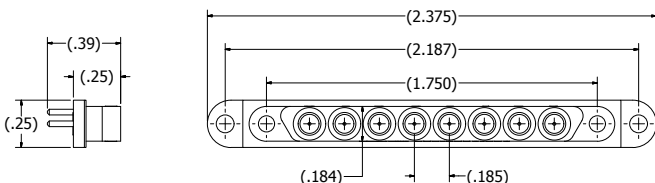


PCB MOUNT RECEPTACLE (Edge Launch)
P/N: 050-3251-001



PCB BOARD LAUNCH PAD (Vertical Launch)

For complete recommended board specifications, see TSM DWG 710-0626

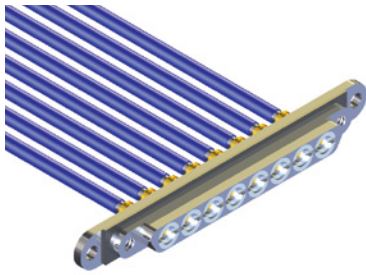


PCB MOUNT RECEPTACLE (Vertical Launch)
P/N: 050-3290-001

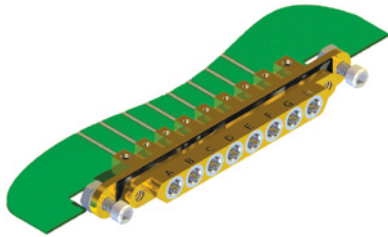
NOTE: All dimensions are in inches.

MINI-MULTIMATE™

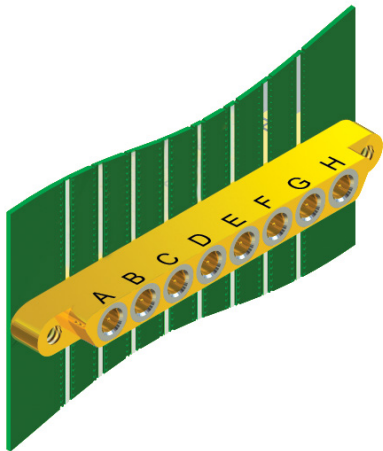
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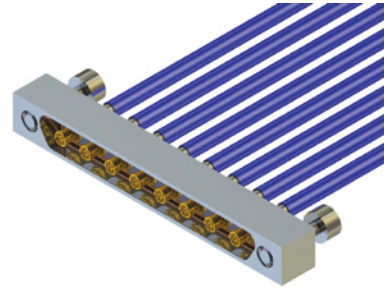
**Male 8 Pack Mount
Cable Launch**
P/N: 050-3055-001



**Male 8 Pack Mount
PCB Edge Launch
Bulkhead Mount**
P/N: 050-3251-001



**Male 8 Pack Mount
PCB Vertical Launch**
P/N: 050-3290-001



Female 8 Pack Mount
P/N: 050-3054-001

Supplemental Materials



Spare Cable Assemblies
Storm Flex® 086 cable



Contact release tool for use
with Mini-MultiMate™ Female
P/N: 520-3303-003



TELEDYNE
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Everywhereyoulook™

AS9100/ISO 9001 REGISTERED

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