

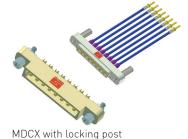
MDCX Coax Connectors

Sabritec's MDCX multipin coax connectors have a low VSWR of 1.25:1 up to 20 GHz (max mated pair). Each coax contact has a maximum overall diameter of 0.125" fitted into a low-profile metallized or plastic housing. Insert arrangements are available in 4, 6, 8, 10 and 12 way coax assemblies as well as mixed signal, power, coax, and high speed twinax in hybrid arrangements.

MDCX coaxial contacts have a constant 50 ohm airline impedance interface and are 30% smaller than Sabritec's SCX coaxial connectors. Combined signal contacts are available in mil-spec type Size 22 (MIL-C-39029) or Hypertac® low insertion force contacts. Hypertac® contacts feature shock and vibration immunity, high current and voltage ratings, low electrical contact resistance, long life, and low rate of wear.

Sabritec's MDCX line is available with locking post mechanisms or blind-mate hardware attachment. Please consult factory for more details.





MDCX Receptacle

MDCX Plug 2X Ø.188 2X Ø.094 2X Ø.188 2X Ø 09% $^{\oplus}$ (P) 370 .020 .020 370 2X .040 2X .040 .020 .020 \Box .300 .₁₀₀ 🛨

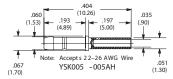
INSERT ARRANGEMENTS RECEPTACLE INSERT ARRANGEMENTS SHELL SIZE 1 SHELL SIZE 2 SHELL SIZE 3 SHELL SIZE 4 0000 000000 0000000 000000000 ARRANGEMENT 4-0 ARRANGEMENT 6-0 ARRANGEMENT 8-0 ARRANGEMENT 10-0 10 Coax or Power .‱OO ‱0000 ‱000000 ARRANGEMENT 2-6 ARRANGEMENT 4-6 ARRANGEMENT 6-6 CUSTOM LAYOUTS CONSULT FACTORY 2 Coax or P 6 Signal 4 Coax or Power 6 Signal 6 Signal PLUG INSERT ARRANGEMENTS SHELL SIZE 2 SHELL SIZE 3 SHELL SIZE 1 SHELL SIZE 4 (0000) 00000 (00000000)000000000 ARRANGEMENT 4-0 ARRANGEMENT 6-0 ARRANGEMENT 8-0 ARRANGEMENT 10-0 10 Coax or Power (0000)(000000;;; ARRANGEMENT 4-6 ARRANGEMENT 2-6 ARRANGEMENT 6-6 CUSTOM LAYOUTS 6 Signal 6 Signal 6 Signal

NOTE: High Speed Size 10 Twinax contacts can be incorporated into the MDCX connector body for alternate insert arrangements in larger footprint patterns. Please consult factory for details.

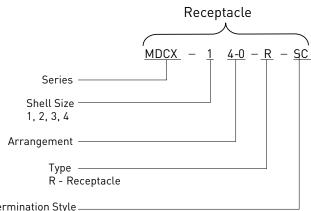
ARRANGEMENTS/DIMENSIONS

Arrangement	Shell Size	A dim.	B dim.	Signal Contact Engagement Dia.
2-6	1	1.005	1.255	.030 .018*
4-0	1	1.005	1.255	N/A
4-6	2	1.355	1.605	.030 .018*
6-0	2	1.355	1.605	N/A
6-6	3	1.705	1.955	.030 .018*
8-0	3	1.705	1.955	N/A
10-0	4	2.057	2.307	N/A

*For use with Hypertac® Crimp Lugs using YSK005-005AH contacts. Contact Factory for details.



Ordering Information



Termination Style —— SC - Straight Crimp* RC - R /A Crimp* SPC - Straight PC Tail RPC - R /A PC Tail

* Coax Contacts Sold Separately for Crimp Version Consult Factory for Mixed Layouts

Plug Termination Style SC - Straight Crimp* RC - R/A Crimp* SPC - Straight PC Tail RPC - R/A PC Tail * Coax Contacts Sold Separately for Crimp Version Consult Factory for Mixed Layouts Type P - Plug Arrangement Shell Size 1, 2, 3, 4

SPECIFICATIONS

Electrical Characteristics

Dielectric Withstanding Voltage	500 VRMS @ sea level with 70% relative humidity			
Insulation Resistance	1000 megaohms min. @ 250 VDC			
Contact Current Rating	5 Amps max. for 0.030 Signal Pins 2.0 Amps max. for .015 Signal Contacts			
Characteristic Impedance	50 Ohm constant airline impedance			
RF HI Potential Withstanding Voltage	125 VRMS @ 5 MHz			
Corona Level @ 70,000 FT	Center contact to intermediate contact: 125 VAC			
Permeability	2.0 max			
Frequency Range	DC to 20 GHz			
VSWR	1.25:1 max. (mated pair)			

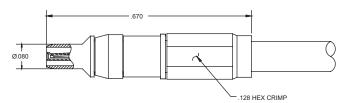
Mechanical & Environmental

Temperature Rating	-65° to +165°C	
Corrosion	MIL-STD-202 Method 101, Test Condition B	
Shock	MIL-STD-202 Method 213, Test Condition B	
Vibration	MIL-STD-202 Method 204, Test Condition B	
Thermal Shock	MIL-STD-202 Method 107, Test Condition B	
	5,000 Cycles min. MDCX	
Durability	500 Cycles min. Size 22 Standard Signal	
	100,000 Cyles min. Hyperboloid Contacts	

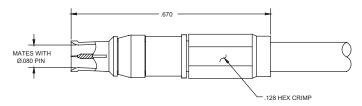
Materials and Finishes

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Center MDCX	Brass per ASTM B16, Au plated per ASTM		
Contacts	B488, Type 3, Class 1.25		
Female MDCX	UNS 17300 Be Cu per ASTM 196 or 197, Au		
Outer Contacts	per ASTM B488 Type 3, Class 1.25		
Male MDCX Outer	Brass per ASTM B16, Au plated per ASTM		
Contacts	B488, Type 3 Class 1.25		
Insulators	PTFE per ASTM D-170 and ultem 1000 resin		
Plug and	Brass per ASTM-B16/B16M, C36000		
Receptacle Outer	Electroless nickel plate per		
Shell	SAE-MAS-C-26074, Class 1		

REMOVABLE MDCX COAXIAL PIN CONTACT

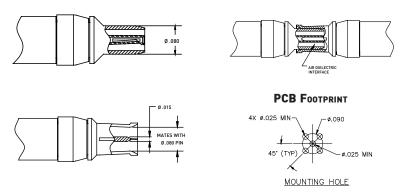


REMOVABLE MDCX COAXIAL SOCKET CONTACT



MDCX Cable Version Contacts Sold Seperately

MDCX Contact Interface



Contact

Local Sales Representative

Sabritec

17550 Gillette Ave Irvine, California 92614 Tel: (949) 250-1244 Fax: (949) 250-1009 customerservice@sabritec.com http://www.sabritec.com