

DESCRIPTION/APPLICATION

Thomas & Betts MODCOM-C female modular connector technology is based on our patented and proprietary design. We employ a cantilevered, parallel contact surface for improved high speed data rates. All parts are 100% quality checked before shipment and are recognized as the most reliable in the industry.

- Data Transmission (DT) Series— to above 200 Mbps. For digital telephony of 64 Kbps up to LAN ATM, T1, E1 telecommunications.
- Recessed Contact (RC) Series— reduced crosstalk, more defined contact surface.

Fully enclosed for optimum EMI/RFI protection. Available in four shield configurations for any application:

- ❶ Smooth (no tabs and/or ribs)
- ❷ Deflector Ribs — deflect line-of-sight radiation in windows or gaps between connectors (multiples) or panels to reduce EMI leakage.
- ❸ Engaging Tabs — for secure chassis/front panel mounting and grounding to panel.
- ❹ Deflector Ribs and Engaging Tabs.

DESIGN ADVANTAGES

- Impedance matching contact configuration—ideal impedance for all 100 ohm and/or 120 ohm based telephony or network systems.
- Lowest possible VSWR in a modular connection—(1.1 VSWR at 200 Mbps).
- Designed for high speed data transmission (data rates up to 350 Mbps with nominal impedance of 96 ohms)
- Large surface mating area for long contact life.

FEMALE MODULAR CONNECTORS



- Multiple points of contact.
- Mating Life: 750 cycles min. RC; 1000 cycles min. DT.
- High reliability, unique copper alloy contact material.
- Leading edge rise time as low as 0.1 nanoseconds with high speed data rates.
- Available from 4 contacts to 10 contacts.
- Low profile design occupies minimal space.
- Universal panel opening fits all connectors.
- Universal PCB layout for all jacks from 4 to 10 contacts
- Available keyed or unkeyed
- Conforms to FCC Part 68 Subpart "F", UL 1863, & IEC 603-7 (8 position).
- Tested 100%.

**4 POSITION
LOW PROFILE FEMALE
CONNECTORS
DT & RC SERIES**

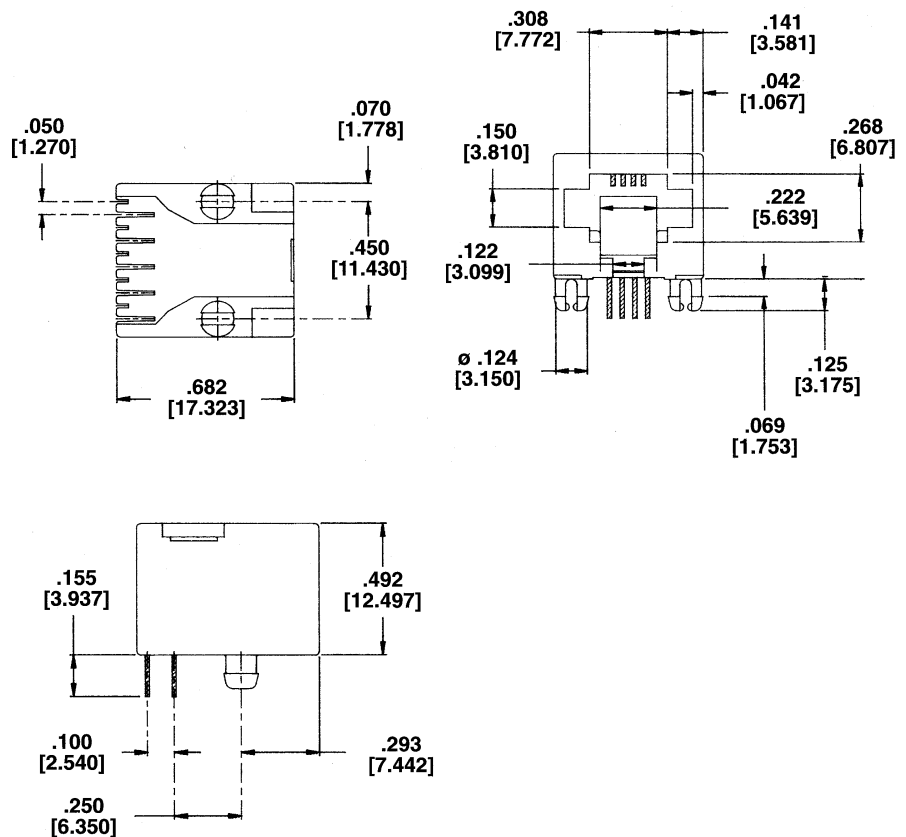


PHYSICAL PROPERTIES

INSULATION MATERIAL: High temperature thermo-plastic rated UL 94V-0
INSULATOR COLOR: Black
CONTACTS: High performance copper alloy
PLATING: Nickel plate overall, gold finish in contact zone, Tin/Lead on contact tails
INSERTION FORCE: 2 lbs max.
PLUG RETENTION: 20 lb retention strength on PCB; Prior to soldering: 20 lb; After soldering: 20 lb.
DURABILITY:
 DT series — Minimum of 1000 insertions and withdrawals without degradation of performance.
 RC series — Minimum of 750 insertions and withdrawals without degradation of performance
 Contacts are protected from overstress by smaller modular plugs.

ELECTRICAL PROPERTIES

VOLTAGE RATING:
 DT Current Rating: 3 amps typ.
 RC Current Rating: 2 amps typ.
INITIAL CONTACT RESISTANCE: 5 milliohms max.
CONTACT RESISTANCE AFTER CYCLING: 10 milliohms max. in accordance with durability specified
INSULATION RESISTANCE: 1000 megohms min.
DIELECTRIC WITHSTANDING: 1300 VRMS @ 60 sec duration
DT DATA TRANSMISSION RATE: 350+ Mbps
RC DATA TRANSMISSION RATE: 200+ Mbps
DT STANDING WAVE REFLECTIONS: VSWR = 1.1
RC STANDING WAVE REFLECTIONS: VSWR = 1.2



Ordering Information

# OF CONTACTS	DT SERIES	RC SERIES
	STANDARD GOLD	STANDARD GOLD
4	020-000-010	020-003-285

**6 POSITION
LOW PROFILE FEMALE
CONNECTORS
DT & RC SERIES**



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INSULATION RESISTANCE: 1000 megohms min.

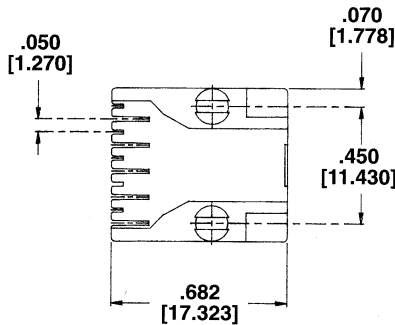
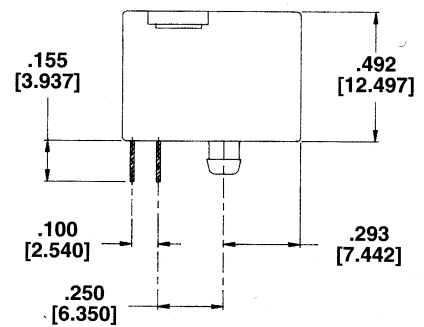
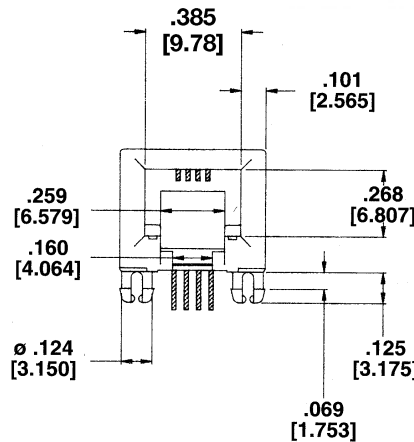
DIELECTRIC WITHSTANDING: 1300 VRMS @ 60 sec duration

DT DATA TRANSMISSION RATE: 350+ Mbps

RC DATA TRANSMISSION RATE: 200+ Mbps

DT STANDING WAVE REFLECTIONS: VSWR = 1.1

RC STANDING WAVE REFLECTIONS: VSWR = 1.2



Ordering Information

# OF CONTACTS	DT SERIES			RC SERIES STANDARD GOLD
	STANDARD GOLD	30 GOLD	50 GOLD	
4	020-000-229	020-001-280	020-000-130	020-003-286
6	020-000-186	020-001-161	—	020-003-287
8	020-000-024	—	—	020-003-288

**8 POSITION
LOW PROFILE FEMALE
CONNECTORS
DT & RC SERIES**

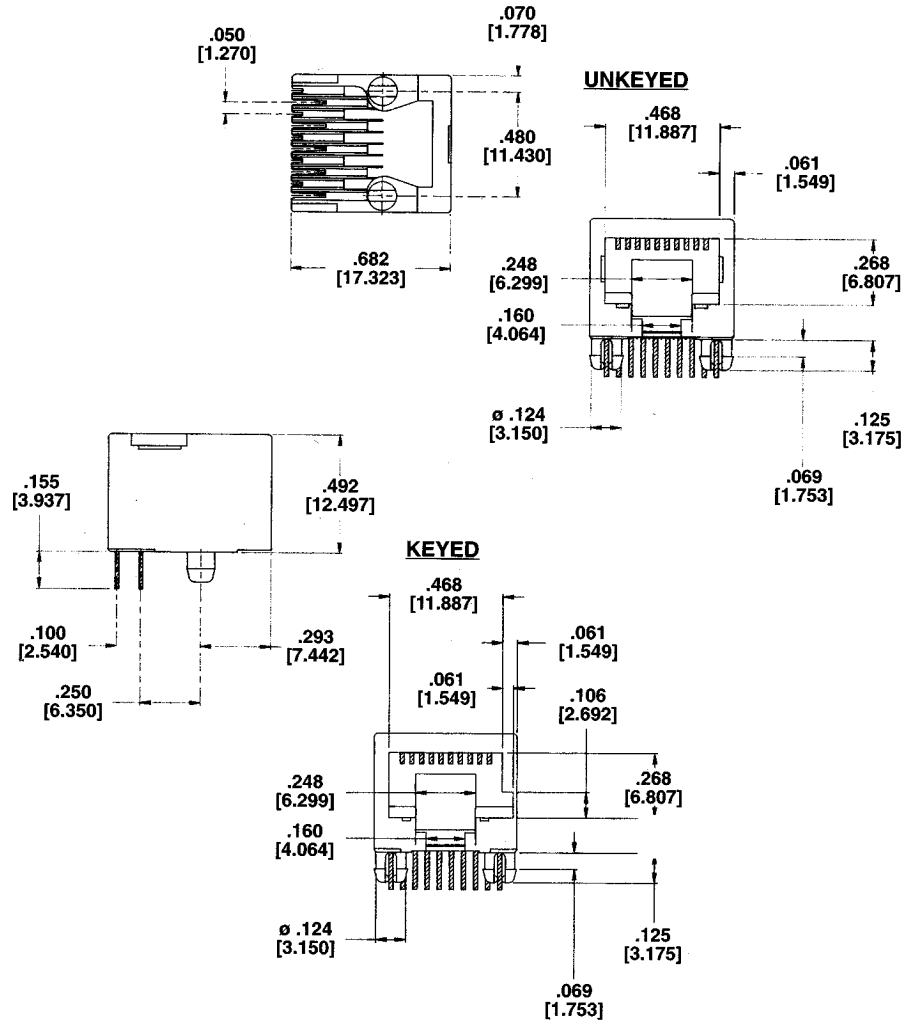


PHYSICAL PROPERTIES

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CONTACTS: High performance copper alloy
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Ordering Information

# OF CONTACTS	STYLE	DT SERIES			RC SERIES
		STANDARD GOLD	30 GOLD	50 GOLD	STANDARD GOLD
4	Keyed	020-000-821	—	—	020-003-341
	Unkeyed	020-003-340	020-003-467	—	020-003-343
6	Keyed	020-003-339	—	—	020-003-342
	Unkeyed	020-000-212	—	—	020-003-344
8	Keyed	020-000-184	020-001-289	—	020-003-289
	Unkeyed	020-000-023	020-001-287	020-002-788	020-003-290
10	Keyed	020-000-069	020-001-244	020-001-261	020-003-291.
	Unkeyed	020-000-068	020-001-668	020-003-338	020-003-292

8 POSITION LOW PROFILE FEMALE CONNECTORS DT SERIES SHIELDED



PHYSICAL PROPERTIES

INSULATION MATERIAL: High temperature thermo-plastic rated UL 94V-0

INSULATOR COLOR: Black

CONTACTS: High performance copper alloy

PLATING: Nickel plate overall, gold finish in contact zone, Tin/Lead on contact tails

SHIELD: Brass, Bright tin plate

INSERTION FORCE: 2 lbs max.

PLUG RETENTION: 20 lb retention strength on PCB; Prior to soldering: 20 lb;

After soldering: 20 lb.

DURABILITY:

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Contacts are protected from overstress by smaller modular plugs.

ELECTRICAL PROPERTIES

VOLTAGE RATING:

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RC Current Rating: 2 amps typ.

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CONTACT RESISTANCE AFTER CYCLING: 10 milliohms max. in accordance with durability specified

INSULATION RESISTANCE: 1000 megohms min.

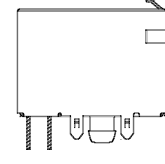
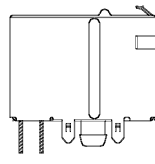
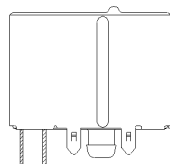
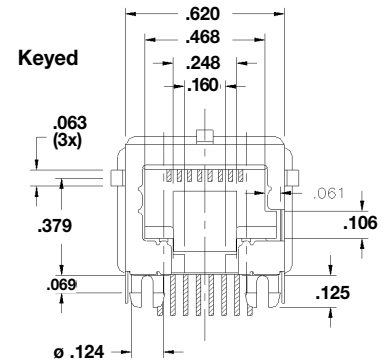
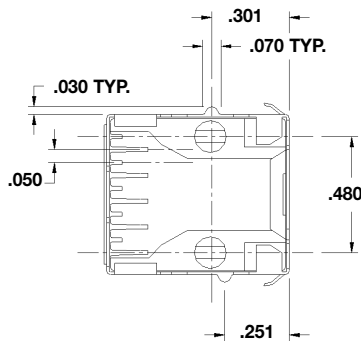
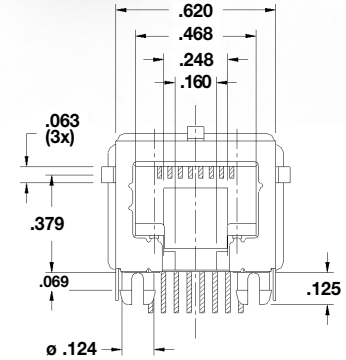
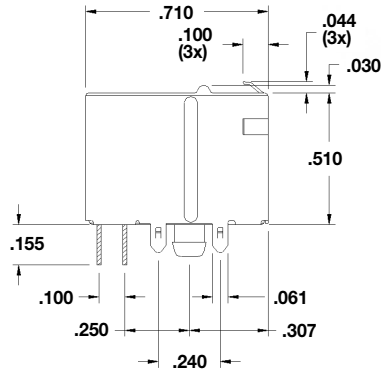
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DT STANDING WAVE REFLECTIONS: VSWR = 1.1

RC STANDING WAVE REFLECTIONS: VSWR = 1.2



Ordering Information

# OF CONTACTS	STYLE	DEFLECTOR RIB	DEFLECTOR RIB & ENGAGING TAB	SMOOTH WALL	SMOOTH WALL WITH ENGAGING TAB
8	Keyed	020-003-426	020-003-424	020-003-425	020-003-427
	Unkeyed	020-003-420	020-003-418	020-003-419	020-003-421
10	Keyed	020-003-619	020-003-617	020-003-618	020-003-620
	Unkeyed	020-003-615	020-003-613	020-003-614	020-003-616