

## NOTES:

If this document is printed it becomes uncontrolled.  
Check with the web for latest revision.

1. THIS BOXMOUNT RECEPTACLE MATES WITH A MTC PLUG CONTAINING SOCKET INSERTS.  
REFER TO APPLICABLE RAYCHEM SPECIFICATION CONTROL DRAWING FOR DETAILS.

⚠ FOR KEYING INFORMATION, SEE RAYCHEM DRAWING D-659-0080.

⚠ THESE ITEMS ARE SUPPLIED UNASSEMBLED.

⚠ DIMENSION SHOWN IS WITH MATED PLUG CONNECTOR: a. WITH CABLE CLAMP  
b. WITHOUT CABLE CLAMP AND WITHOUT EARS

⚠ THE BOXMOUNT RECEPTACLE IS REAR PANEL MOUNTED BY REMOVING AS MANY PANEL  
WASHERS AS REQUIRED TO ACCOMMODATE THE THICKNESS OF THE PANEL BEING USED.  
SEE SHEET 3, TABLE 3.

⚠ .025 WIRE WRAPPABLE POST DESIGNED TO MIL-STD-1130.

⚠ PART NUMBER VARIABLE: (SEE SHEET 2 FOR ADDITIONAL INFORMATION)

MTC50-BXX-PXX-XXX-XXX

PRE-PRODUCTION LEVEL (SEE TABLE 4) (BLANK WHEN NOT APPLICABLE)  
MODIFICATION NUMBER. REFER TO APPLICABLE MOD DESCRIPTION SHEET.  
("BLANK WHEN NOT APPLICABLE")

1 = LONG TAIL  
2 = SHORT TAIL  
3 = 90° BEND "B" DIRECTION

2=NICKEL PLATE  
3=CADMIUM OVER NICKEL PLATE

1=1 INCH  
2=2 INCH

F = FLANGED WITH STANDARD PANEL GASKET

J = FLANGELESS

S = FLANGED/SHIELDED WITH EME PANEL GASKET

Y = SPECIALS: REFER TO INDIVIDUAL SPECIFICATION  
CONTROL DRAWINGS FOR DESCRIPTIONS

⚠ SEE SHEET 3, TABLE 2, FOR WEIGHTS. WEIGHTS SHOWN ARE WITHOUT DUST CAP AND WITHOUT POST PROTECTOR.

⚠ CAP SCREW INSTALLATION TORQUE 14-16 INCH POUNDS.

⚠ DUST CAP SUPPLIED WITH EACH RECEPTACLE HOUSING.

⚠ ONE INCH TERMINATION POST NUMBERING IS SHOWN ON SHEET ONE FOR .025 POSTS. FOR TWO INCH TERMINATION  
POST NUMBERING AND .020 x .025 TERM POST MARKING SEE SHEET 2, DETAIL "Y".

⚠ INNER GASKET IS SUPPLIED ONLY WHEN THE APPROPRIATE INNER GASKET MODIFICATION IS APPLIED TO THE  
END OF THE PART NUMBER. REFER TO MODIFICATION DESCRIPTION SHEETS FOR APPROPRIATE MOD. NUMBER.  
CONSULT FACTORY WHEN UNCERTAINTIES EXIST.

⚠ CONNECTORS WITH BENT TAILS FOR PCB APPLICATIONS HAVE .020 x .025 POSTS.

⚠ WHEN MOUNTING FLANGELESS CONNECTORS ADJACENT TO ONE ANOTHER AND USING THE .400 MINIMUM CENTERLINE LOCATION.  
THERE WILL BE NO WEB BETWEEN PANEL CUT-OUTS. SEE SHEET 3 FOR DETAILS.

## VIEW X-X

PANEL THICKNESS  
.093 [2.36] MAX.  
.031 [7.9] MIN.

.178 [4.52] MIN.  
FROM FACE OF  
CONNECTOR SHELL  
TO FACE OF  
RETAINER BUSHING

(PLUG CONNECTOR)

(.580 [14.73])  
SEE SHEET 2 TABLE 1

.330  
16 [4.1]  
34 [8.6]

1.25  
[31.8]

1.50  
[38.1]  
MIN.

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.  
METRIC DIMENSIONS ARE  
IN BRACKETS.

DECIMALS

.XXX ± .005 [± .13mm]

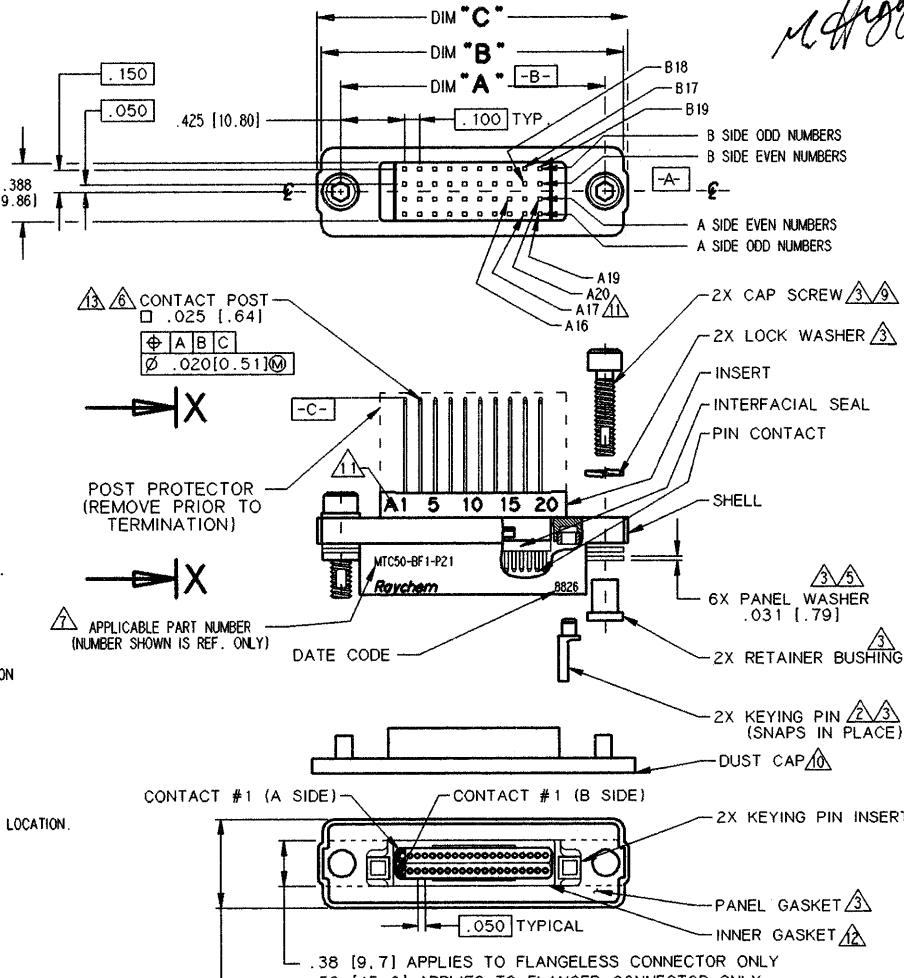
.XX ± .02 [± .51mm]

ANGLES

.X ±

WEIGHT: MAXIMUM  
(SEE SHEET 3, TABLE 1)

REVISIONS		DATE	APPROVED
LTR	DESCRIPTION	8/13/97 M. HIGG	
REVISED PER ECN T-21623		8/13/97 M. HIGG	



## SPECIFICATION CONTROL DRAWING

© Raychem Corporation 1988

Raychem

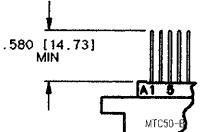
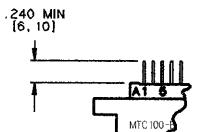
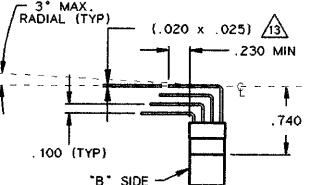
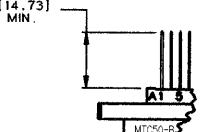
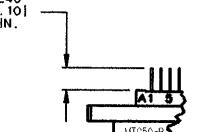
RAYCHEM CORPORATION  
300 CONSTITUTION DRIVE  
MENLO PARK, CALIFORNIA 94025

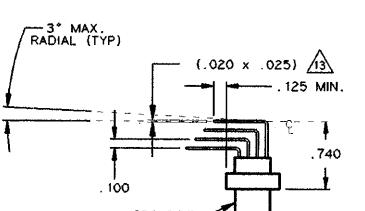
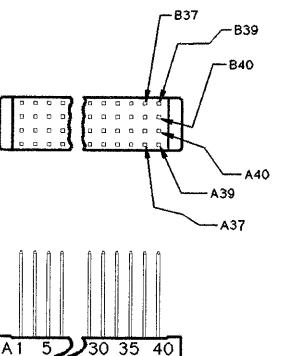
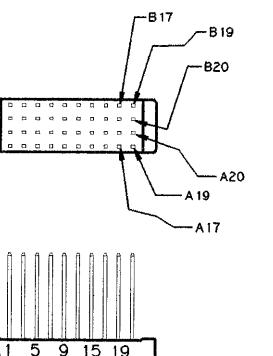
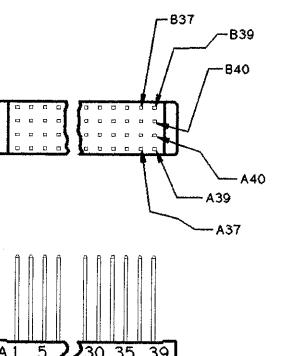
TITLE  
CONNECTOR  
RECEPTACLE, FLANGED, BOXMOUNT,  
.025 SQ. TERMINATION POST

MTC50 SERIES

SIZE CODE IDENT. NO. Dwg. No.  
C 06090 MTC50-BXX-PXX-XXX-XXX

REV D  
DO NOT SCALE THIS DRAWING  
SHEET 1 OF 3

TABLE 1 BASIC DESIGNS AVAILABLE				
				
TERMINATION POSTS .580 MINIMUM LENGTH FLANGELESS MTC50-BJX-PX1	TERMINATION POSTS .240 MINIMUM LENGTH FLANGELESS MTC50-BJX-PX2	TERMINATION POSTS BENT 90° IN "B" DIRECTION FLANGELESS MTC50-BJX-PX3	TERMINATION POSTS .580 MINIMUM LENGTH FLANGED MTC50-BF/SX-PX1	TERMINATION POSTS .240 MINIMUM LENGTH FLANGED MTC50-BF/SX-PX2

			
TERMINATION POSTS BENT 90° IN "B" DIRECTION FLANGED MTC50-BF/SX-PX3	TWO INCH TERMINATION POST NUMBERING .025 SQ. POST	ONE INCH TERMINATION POST NUMBERING .020 X .025 SQ. POST	TWO INCH TERMINATION POST NUMBERING .020 X .025 SQ. POST

DETAIL Y

If this document is printed it becomes uncontrolled.  
Check with the web for latest revision.

## SPECIFICATIONS:

## MATERIALS:

A. SHELL	ALUMINUM ALLOY PER QQ-A-591
B. CAP SCREW	STAINLESS STEEL PER QQ-S-763, 300 SERIES
C. RETAINER BUSHING	STAINLESS STEEL PER QQ-S-763, 300 SERIES
D. PANEL WASHER	STAINLESS STEEL PER QQ-S-763, 300 SERIES
E. LOCK WASHER	STAINLESS STEEL PER QQ-S-763, 300 SERIES
F. PIN CONTACT	COPPER ALLOY 172 PER QQ-C-533
G. STANDARD PANEL GASKET	SILICONE ELASTOMER PER MIL-R-25988
EME PANEL GASKET	CONDUCTIVE FLUOROSILICONE
H. PIN INSERT	HIGH GRADE POLYARYLENE THERMOPLASTIC
J. KEYING PIN INSERT	HIGH GRADE POLYARYLENE THERMOPLASTIC
K. KEYING PIN	HIGH GRADE POLYARYLENE THERMOPLASTIC
L. INTERFACIAL SEAL	FLUOROSILICONE ELASTOMER PER MIL-R-25988

## FINISH:

APPLIES TO NICKEL PLATED CONNECTORS (STANDARD PLATING)

APPLIES TO CADMIUM PLATED CONNECTORS

A. SHELL	NICKEL PLATED PER MIL-C-26074 CLASS 3, GRADE B	CADMUM PLATED PER QQ-P-416 OVER NICKEL UNDERPLATE
B. CAP SCREW	PASSIVATED PER QQ-P-35	CADMUM PLATED PER QQ-P-416
C. RETAINER BUSHING	PASSIVATED PER QQ-P-35	CADMUM PLATED PER QQ-P-416
D. PANEL WASHER	PASSIVATED PER QQ-P-35	CADMUM PLATED PER QQ-P-416
E. LOCK WASHER	PASSIVATED PER QQ-P-35	CADMUM PLATED PER QQ-P-416
F. PIN CONTACT	GOLD PLATED PER MIL-G-45204 TYPE 1, GRADE C, CLASS I	

## DESIGN AND CONSTRUCTION:

THE CONNECTORS SPECIFIED HEREIN ARE PANEL MOUNTED RECEPTACLES WITH FIXED (NON REMOVABLE) PIN INSERTS AND CONTACTS. THE CONNECTOR IS WITHOUT PROVISIONS FOR CABLE CLAMPS OR TERMINATION SEALS.

## PERFORMANCE:

THE APPLICABLE RAYCHEM SPECIFICATION FOR THIS PART IS C6111.  
THIS PART IS NOT QUALIFIED TO C6111.

HUMIDITY  
ALTITUDE IMMERSION  
ALTITUDE-LOW TEMPERATURE  
FLUID IMMERSION } THE CONNECTOR TERMINATION END MUST BE SUITABLY PROTECTED FOR TESTING OR APPLICATION IN ANY OF THESE ENVIRONMENTS.

TABLE 2

CONNECTOR SIZE	"A"	"B"	"C"	"X"	"Y"	"Z" (MIN)	WEIGHT lbs.(gr.) MAX
1 INCH	1.750 [44.45]	2.00 [50.8]	X	1.750 [44.45]	1.520 [38.61]	0.400 [10.16]	0.038 [17.24]
	1.750 [44.45]	X	2.06 [52.3]	1.750 [44.45]	1.520 [38.61]	0.600 [15.24]	0.048 [21.77]
2 INCH	2.750 [69.85]	3.00 [76.2]	X	2.750 [69.85]	2.520 [64.00]	0.400 [10.16]	0.057 [25.85]
	2.750 [69.85]	X	3.06 [77.71]	2.750 [69.85]	2.520 [64.00]	0.600 [15.24]	0.072 [32.66]

TABLE 3 A

PANEL THICKNESS	NUMBER OF PANEL WASHERS FOR EACH FASTENER
.031/.036 [.8]/[.9]	2
.062/.067 [1.5]/[1.7]	1

TABLE 4 PRE-PRODUCTION TRACKING

PART NUMBER	LEVEL	DESCRIPTION
MTC50-BJ1-P33-PP1	PP1	MACHINED SHELL

If this document is printed it becomes uncontrolled.  
Check with the web for latest revision.