

Xtra Long Life Transfer Switch

50Ω DC to 18 GHz

MTS-18XL-B



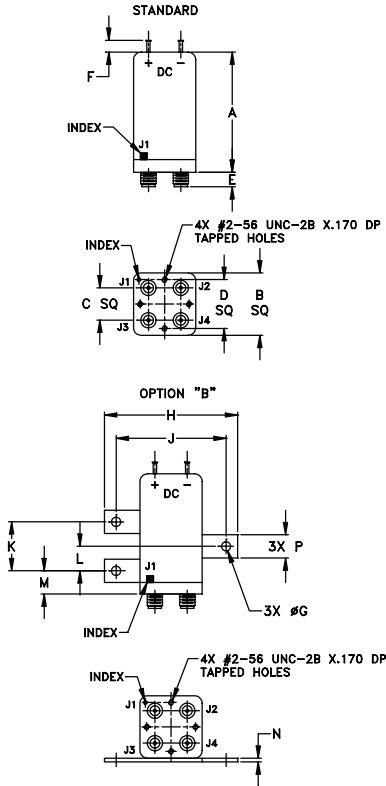
CASE STYLE: DS810

Connectors	Model	Price	Qty.
SMA	MTS-18XL-B	\$259.95	(1-9)

Maximum Ratings

Operating Temperature	-15°C to +45°C
Storage Temperature	-15°C to +45°C

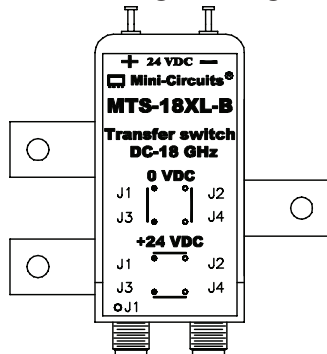
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	
1.97	1.02	.53	.800	.240	.19	.150	2.18	
50.04	25.91	13.46	20.32	6.10	4.83	3.81	55.37	
J	K	L	M	N	P			wt
1.800	.800	.400	.380	.06	.38			grams
45.72	20.32	10.16	9.65	1.52	9.65			70

Marking Drawing



Features

- low insertion loss, 0.2 dB typ.
- high isolation, 70 dB typ.
- high power handling, 10W
- ultra reliable
- break-before-make configuration
- failsafe microwave transfer switch
- protected by US Patents 4,908,588; 5,272,458; 6,650,210

Applications

- (ATE) automatic test equipment
- reliable "sleep-time" switching
- redundancy switching for microwave radio

Electrical Specifications

FREQUENCY (GHz)	INSERTION LOSS (dB)		ISOLATION (dB)		VSWR (:1)		DC CURRENT @+24V (mA)		RF POWER* (W)
	Typ.	Max.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Max.
DC - 1	0.10	0.15	100	85	1.05	1.10			
1 - 8	0.10	0.25	90	75	1.15	1.20			
8 - 12	0.20	0.36	86	70	1.15	1.30	175	215	10
12 - 18	0.25	0.45	76	60	1.15	1.30			

*Power Ratings at ambient temperature 25°C, non-switching mode.

Additional Specifications

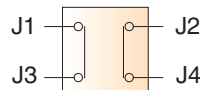
Operating Voltage Range	24V (nom) ±1V
Switching Time (typ.)	20ms
Life† (Min.)	1 year/10 million cycles

† tested at 0 dBm RF power.

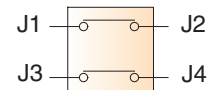


Switching States

DE-ENERGIZED DC=0V



ENERGIZED DC=24V



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

REV. OR
M121140
MTS-18XL-B
BC/CP/AM
090206
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Typical Performance Data

FREQ. (MHz)	ON INSERTION LOSS (dB)		OFF ISOLATION (dB)		VSWR energized (:1)		VSWR de-energized (:1)	
	J1-J2	J1-J3	J1-J2	J1-J3	J1	J2	J1	J2
10.00	0.01	0.01	90.66	94.50	1.00	1.00	1.00	1.00
100.00	0.01	0.01	94.93	100.05	1.00	1.00	1.00	1.00
500.00	0.03	0.03	92.59	100.93	1.01	1.01	1.01	1.01
700.00	0.03	0.03	108.21	91.48	1.01	1.01	1.01	1.01
800.00	0.04	0.04	92.52	102.45	1.01	1.01	1.01	1.01
1000.00	0.04	0.04	92.45	100.96	1.01	1.01	1.01	1.01
2000.00	0.06	0.06	100.79	97.34	1.01	1.02	1.01	1.01
3000.00	0.07	0.07	93.32	102.92	1.05	1.05	1.04	1.04
4000.00	0.08	0.08	95.89	93.03	1.07	1.09	1.06	1.06
5000.00	0.10	0.09	95.75	90.70	1.08	1.10	1.07	1.07
6000.00	0.11	0.10	100.15	94.32	1.08	1.12	1.08	1.09
7000.00	0.11	0.11	89.08	99.96	1.04	1.08	1.05	1.05
8000.00	0.12	0.12	94.59	91.64	1.04	1.02	1.02	1.02
9000.00	0.14	0.14	102.19	93.50	1.11	1.09	1.10	1.10
10000.00	0.16	0.16	95.10	95.63	1.16	1.13	1.14	1.14
11000.00	0.17	0.16	95.14	88.79	1.14	1.12	1.12	1.11
12000.00	0.16	0.16	87.77	87.85	1.09	1.08	1.09	1.08
14000.00	0.18	0.17	93.24	98.95	1.04	1.04	1.02	1.01
16000.00	0.21	0.20	84.54	82.94	1.08	1.02	1.05	1.06
18000.00	0.25	0.21	81.87	88.03	1.20	1.08	1.16	1.14

