

# SPST Through SP8T

## HIGH POWER

### Series MW 4121XY

- ▶ Over 100 Watt CW and 1000 Watt Peak Power Handling
- ▶ Low Loss
- ▶ High Isolation
- ▶ Wideband, Narrowband
- ▶ SPST Through SP8T Configurations
- ▶ Small Size and Weight
- ▶ High Reliable MIC Technology

## GENERAL INFORMATION

### DC Selection and Driver Requirements

Two options of high power drivers are available depending mainly on the nominal power handling, the number of output ports and the required switching speed.

### OPTIONS

#### Option I (High Power Drivers)

For switches with power handling up to 60W, the following driver is used:

- +5V at 100 mA per arm
- 15V at 20 mA

#### Option II (Super High Power Drivers)

For switches with power handling up to 100W, the following driver is used:

- +5V at 20 mA
- 5V at 100 mA per arm
- +28V at 20 mA

Note; All currents are typical



## HOW TO ORDER

Please specify the model number following the example below:

Example:

MW 4121 -  $\frac{1}{1}$  -  $\frac{4}{2}$  -  $\frac{8}{3}$  -  $\frac{20}{4}$  -  $\frac{45}{5}$  -  $\frac{T}{6}$  -  $\frac{C}{7}$

This example presents the model number for an SPST switch operating between 4 to 8 GHz with 20W CW power handling, 45dB minimum isolation, cold switching capability and TTL controlled.

### LEGEND:

- 1 - Number of outputs  
(1 for an SPST; 8 for an SP8T)
- 2 - Lowest frequency in GHz
- 3 - Highest frequency in GHz
- 4 - CW power handling in Watts
- 5 - Minimum isolation in dB  
(standard 20 dB and 40 dB, custom is possible)
- 6 - Control (T = TTL, E = ECL, 0 = RS442)
- 7 - Switching type  
(C = cold switching, H = hot switching)

## SPECIFICATIONS

### High Power Switches Up to 50W CW

Model Number	Power Handling (Watt CW)	Frequency Range (GHz)	Insertion Loss (dB) typ./max.	Isolation (dB)typ./min.	Switching Speed (n-sec) typ.
MW-41212-1-2	50	1-2	0.6/1.0	35/30	600
MW-41212-2-4	50	2-4	0.8/1.2	30/25	600
MW-41212-4-8	50	4-8	0.9/1.3	26/20	600
MW-41212-6-18	50	6-18	1.0/1.4	24/18	600

### High Power Switches 50 to 100W CW

Model Number	Power Handling (Watt CW)	Frequency Range (GHz)	Insertion Loss (dB) typ./max.	Isolation (dB)typ./min.	Switching Speed (n-sec) typ.
MW-41212P-1-2	100	1-2	0.7/1.1	35/30	600
MW-41212P-2-4	100	2-4	0.9/1.3	30/25	600
MW-41212P-4-8	100	4-8	1.0/1.4	26/20	600
MW-41212P-6-18	100	6-18	1.1/1.5	24/18	600

## GENERAL SPECIFICATIONS

VSWR:

- ▶ 2:1 max.

Switching Type:

- ▶ Cold (No RF during the switching command).
- ▶ Hot switching up to 50 Watts is an option

## CASES

Series MW 412 XY utilizes plated aluminum cases with a near perfect surface and heat sinks to obtain low thermal resistances ensuring high reliability and a long service life.

Standard cases produced at Elisra are depicted in the mechanical outline drawing. Special cases are available upon request. (See page 3-38)