

◆ Product Description

Micable has developed a 1×64 solid state switch matrix covering 0.5-6GHz. Compared with the traditional solid state switch matrix, it has lower 4.5dB typ. insertion loss, higher 70 dB minimum isolation and 250 ns switching speed. The matrix uses phase & amplitude matched design, typical phase and amplitude consistency among each ports are at $\pm 5^\circ$ and ± 0.3 dB. The user can control the switch matrix via USB/Ethernet or manual control.

◆ Key Features

- Wide frequency range 0.5-6GHz
- Low insertion loss, 4.5dB Typ.
- High isolation 70dB Min.
- Excellent amplitude and phase consistency
- Excellent repeatability and high reliability
- Manual & USB/Ethernet control, easy to use

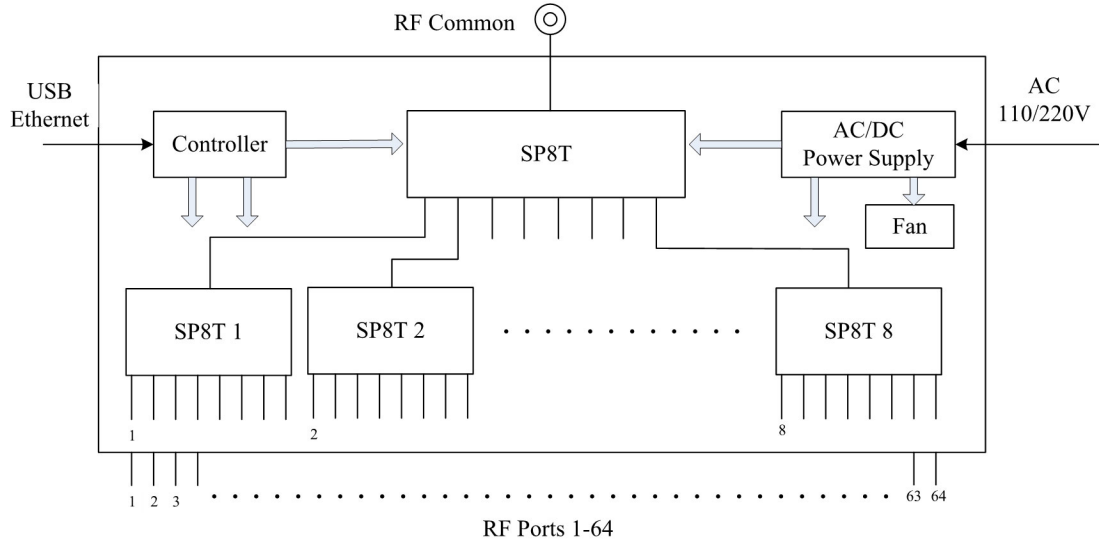
◆ Specifications

Parameter	Min.	Typ.	Max.
Frequency Range	0.5 GHz	-	6 GHz
Number of Input Channels			1
Number of Output Channels ¹	-	-	64
Insertion Loss	-	4.5 dB	5.5 dB
VSWR	-	1.3:1	2:01
Isolation	70 dB	80 dB	-
Phase Consistency	-	$\pm 5^\circ$	$\pm 15^\circ$
Amplitude Consistency	-	± 0.3 dB	± 0.6 dB
Input Power	-	-	30 dBm
Switching Time ²	-	-	250 nSec
Power Supply	100 VAC	-	240 VAC
Control Ports	USB / Ethernet		
RF In/Out Connector	SMA Female		
Operating Temperature	0~+70°C		
Storage Temperature	-40~+70°C		

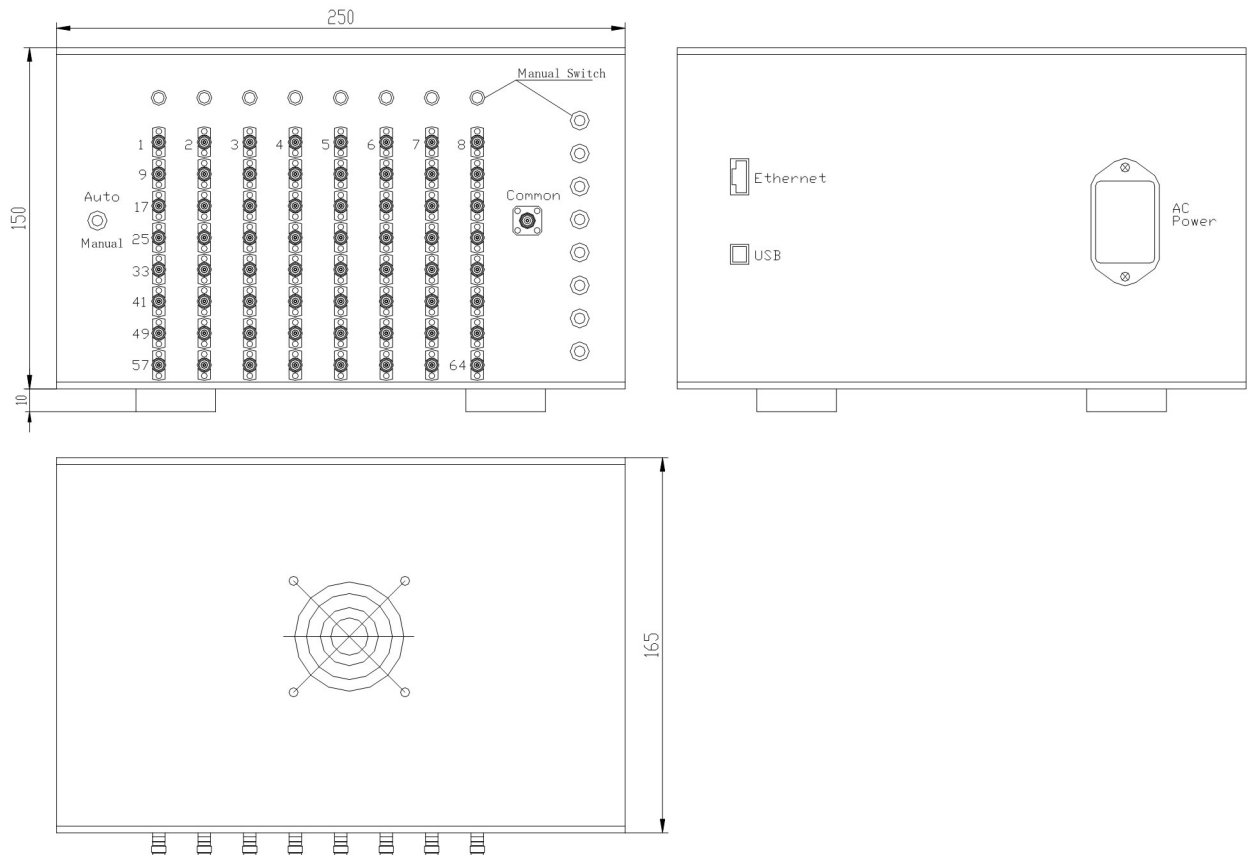
Note 1: The input and output ports are reciprocal.

Note 2: The switching time is defined as the switching time of the internal solid-state switch, and is specified without communication delay.

◆ Schematic Diagram



◆ Outline Drawing



◆ Typical Tested Curve

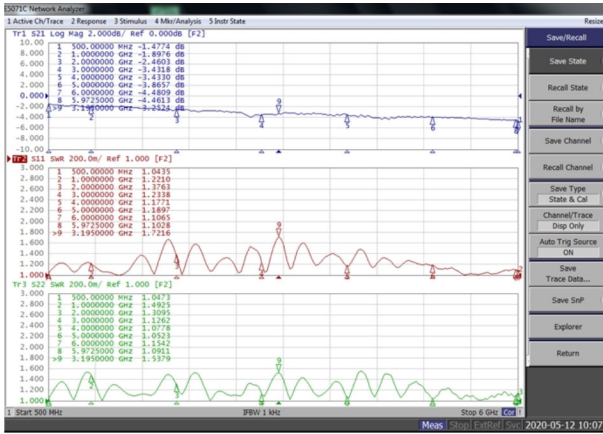


Fig.1. Insertion Loss & VSWR of 3rd Channel

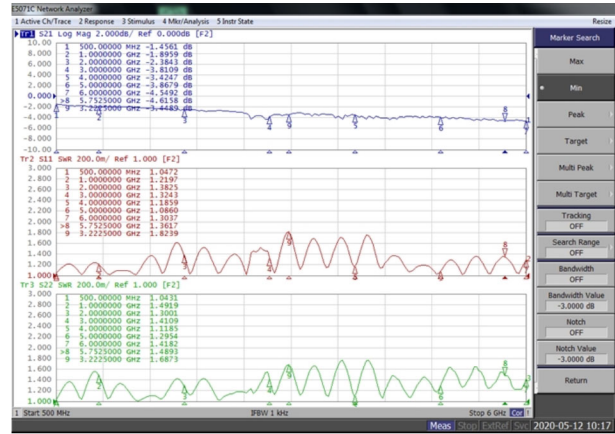


Fig.2. Insertion Loss & VSWR of 50th Channel

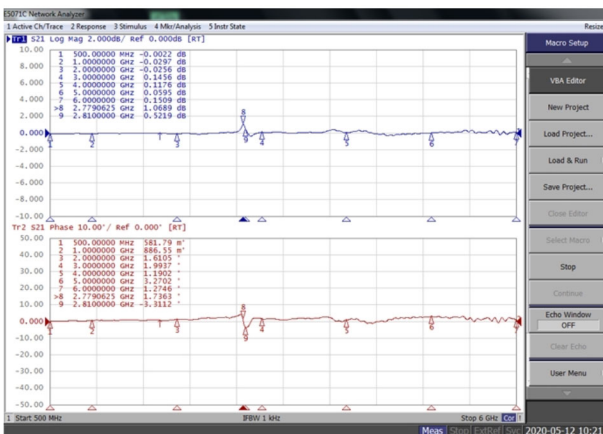


Fig.3. Balance between 2nd & 3rd Channels



Fig.4. Balance between 2nd & 50th Channels

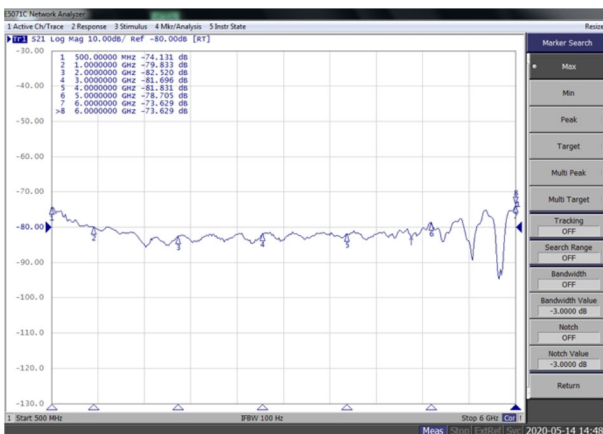


Fig.3. Isolation between 2nd & 3rd Channels

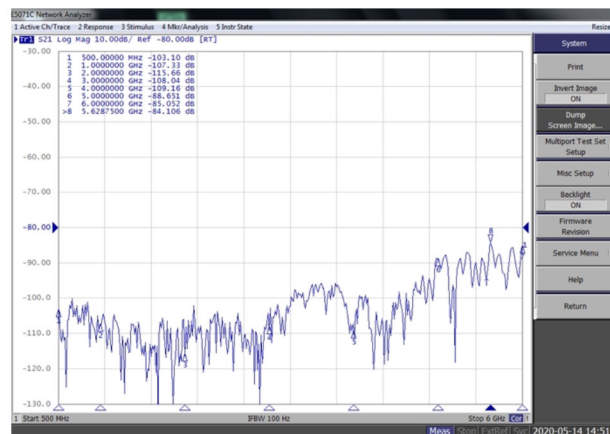


Fig.3. Isolation between 2nd & 50th Channels