

# QMSD3K

## DC~40GHz, 2P3T

Features:  
 \* Low VSWR  
 \* Low Insertion Loss  
 \* High Isolation

Applications:  
 \* Wireless  
 \* Transmitter  
 \* Laboratory Test  
 \* Radar

### Electrical

Frequency:		DC~40GHz		
Impedance:		50Ω		
Frequency range (GHz)	Insertion Loss (dB)	Isolation (dB)	VSWR	
DC-6	0.3	70	1.3	
6-12	0.4	60	1.4	
12-18	0.5	55	1.5	
18-26.5	0.6	50	1.6	
26.5~32	0.7	50	1.7	
32~40	0.9	50	1.9	
Voltage*1 (V)		12	24	28
Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

[1] The voltage can be selected according to user requirements.

### Mechanical

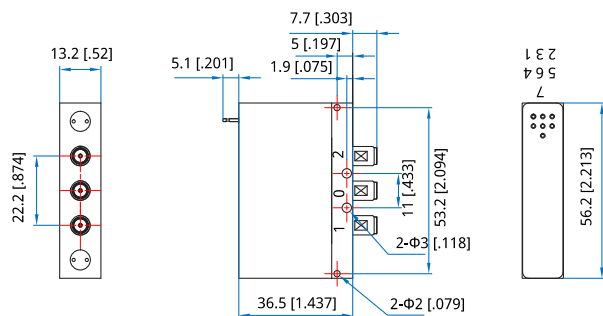
Size*2:	36.5*53.2*13.2mm 1.437*2.094*0.52in
Switching Sequence:	Break before Make
Switching Time:	15mS max.
Operation Life:	2M Cycles
Vibration (operating):	20-2000Hz, 10G RMS
Mechanical Shock (non-operating):	30G, 1/2sine, 11mS
RF Connectors:	2.92mm Female
Power Supply & Control Interface Connectors:	Feed Through/Terminal Post
Mounting:	2-Φ3mm through-hole
	2-Φ2mm through-hole

[2] Exclude connectors.

### Environmental

Temperature:	-25~+65°C
Extended Temperature:	-40~+85°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±0.5mm [±0.02in]

### Additional Options

TTL: T  
 Indicators: I  
 Extended Temperature: Z  
 Positive Common  
 Waterproof Sealing Type

### How To Order

#### QMSD3K-F-WXYZ

F: Frequency in GHz  
 W: Actuator Type. Failsafe: 0, Latching: 1.  
 X: Voltage. +12V: E, +24V: K, +28V: M.  
 Y: Power Interface. Pin: 0  
 Z: Additional Options.

#### Examples:

To order a 2P3T switch, DC-40GHz, Failsafe, +12V, D-Sub, TTL, Indicators, specify QMSD3K-40-0E1TI.

Customization is available upon request.

## Pin Numbering

### Failsafe

Pin	Function	Pin	Function
1	VDC( RF: 2 to 3,4 to 5)	4~5	Indicator (1~2)
2	NC	6	Indicator (COM)
3	COM( RF: 2 to 3,4 to 5)	7~9	NC

### Failsafe&TTL

Pin	Function	Pin	Function
1	VDC( RF: 2 to 3,4 to 5)	4~5	Indicator (1~2)
2	A1( RF: 2 to 3,4 to 5)	6	Indicator (COM)
3	COM( RF: 2 to 3,4 to 5)	7~9	NC

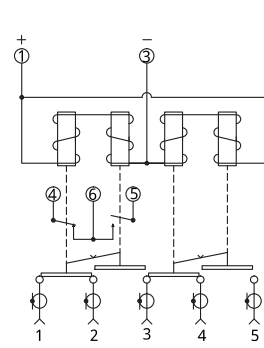
### Latching

Pin	Function	Pin	Function
1	VDC( RF: 1 to 2,3 to 4)	4~5	Indicator (1~2)
2	VDC( RF: 2 to 3,4 to 5)	6	Indicator (COM)
3	COM	7~9	NC

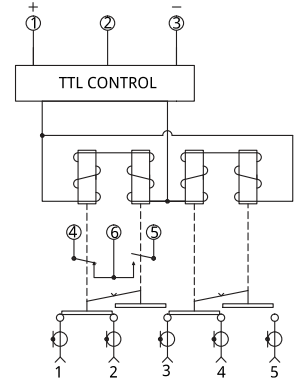
### Latching&TTL

Pin	Function	Pin	Function
1	VDC	4	A2( RF: 2 to 3,4 to 5)
2	A1( RF: 1 to 2,3 to 4)	5~6	Indicator (1~2)
3	COM	7	Indicator (COM)

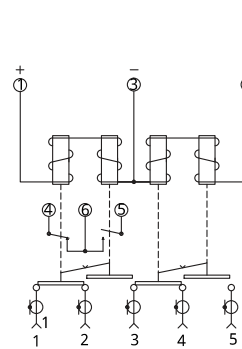
## Driving Schematic Diagram



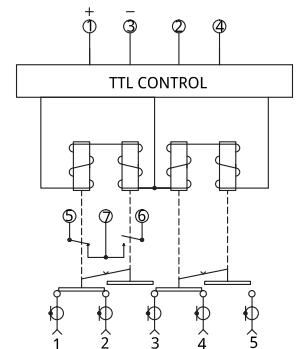
Failsafe



Failsafe+TTL



Latching



Latching+TTL