

### 1dB LSB, 0.01-40GHz, 5 bit Digital Attenuator, Range 62dB

2022-9-1



#### Description:

AT-6DAT-0040SN-60 is a 0.01-40GHz digital attenuator with 1dB LSB, 6bit control, 62dB attenuation range. The insertion loss is -16dB typical.

The attenuator is suitable for broadband test, and 5G millimeter wave application. The attenuator is with 2.92mm Female connector. There are DC Block within input and output ports.

More information, visit [www.atmicrowave.com](http://www.atmicrowave.com)

#### Feature

- ✓ Frequency: 0.01-40GHz
- ✓ 6bit, 1dB LSB
- ✓ Attenuation Range: 62dB
- ✓ Very fast speed

#### Application

- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System
- ✓ Telecom Communication

#### Electronical Specifications:

Parameter	Min	Typical	Max
Frequency		0.01-40GHz	
Insertion Loss		0.01-18GHz: -12dB 18-40GHz: -18dB	
Control Bit		6bit	
Step		1dB LSB	
Attenuation Range		62dB	
Power Supply		-5V/10mA	
TTL		Low=0 to +0.8V High=+2.3 to +5V	
Return Loss		-10dB	
P1dB		+23dBm	
Spec Temp		25C	





# AT-6DAT-0040SN-60

## 10MHz-40GHz Digital Attenuator

### Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
DC and Control	J30J-9ZKSP
Case Material	Copper
Finish	Gold Plated
Weight	50g
Size:	See outline

### Absolute Maximum Ratings Table

Parameter	Value
VDD	-6V
RF Power	+25dBm
Operating Temperature	-40 to +85C
Storage Temperature	-65 to +150C

### Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.





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## 10MHz-40GHz Digital Attenuator

### True Table

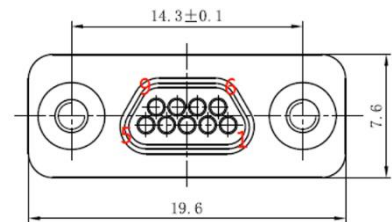
D1	D2	D3	D4	D5	D6	Attenuation State
1	1	1	1	1	1	0 (reference)
0	1	1	1	1	1	1
1	0	1	1	1	1	2
1	1	0	1	1	1	4
1	1	1	0	1	1	8
1	1	1	1	0	1	16
1	1	1	1	1	0	31
0	0	0	0	0	0	62

Low=0 to +0.8V

High= +2.3to +5V

J30J-9ZKSP Pin Description:

Pin Number	Function
1	D1
2	D2
3	D3
4	D4
5	D5
6	D6
7	NC
8	VEE=-5V
9	GND



## Dimension (mm)

