Product Description:

The magneto-optical switch adopts an all-solid crystal design and a unique electromagnetic design. The switching process of the optical circuit does not involve any mechanical moving parts, and has a faster switching speed and better stability and reliability. The magneto-optical switch is divided into two types: one-way and two-way. The incident beam of a unidirectional device can only pass in one direction through the magneto-optical switch, and the light path passing in the opposite direction will be isolated by the magneto-optical switch; the incident beam of a bidirectional device can pass in both directions.

Features:

- Low insertion loss
- Typical switching speed≤50us
- Transparent transmission of signals
- High stability and high reliability
- Power-down lockout
- Low voltage drive

Parameter:

Parameter:	Unit	Index	
Working wavelength	nm	1520~1580	1295~1325
Test wavelength	nm	1550 / 1310	
Insertion loss（1）	dB	Typ: 0.7 Max: 1.0	
Return loss（1）	dB	＞50	
Crosstalk	dB	Unidirectional：＞40 bilateral：＞35	
PDL	dB	<0.2	
Operating Voltage	V	5.0	
Lifetime	Cycles	$> 10^{14}$	
Switching speed	us	Typ: 50 Max: 200	
Maximum optical power（2）	mW	<500	
Operating temperature（3）	°C	-5 ~ +70	
Storage temperature	°C	-40 ~ +85	
Relative humidity	%	5 ~ 95	
Dimension	mm	(L)58.2x(W)8.4x(H)8.4 ±0.2	

Remark:（1）Tested within the operating temperature range and without connectors;
（2）Support up to 2W customization;
（3）Support -40~85 customization.

Tip: The above are the commonly used optical switch parameters, if you have other requirements, you can consult and customize.

Pin driver:

Parameter	Max	Typ	minimum	Unit
Drive voltage	4.5	5	5.5	V
Resistance	15	18	22	Ω
pulse duration	0.2	0.3	0.5	ms

Bilateral Magneto-optical switch

Optical Route	PIN1	PIN2
Port1<--->Port2	-	+
Port1<--->Port3	+	-

Unidirectional Magneto-optical switch 1*2

Optical Route	PIN1	PIN2
Port1--->Port2	-	+
Port1--->Port3	+	-

Unidirectional Magneto-optical switch 2*1

Optical Route	PIN1	PIN2
Port2--->Port1	+	-
Port3--->Port1	-	+

Dimension：