

ND102M4L

Antenna Switching Diode Array (4 in 1)

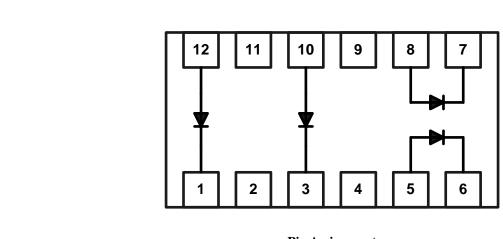
Features

- 4 channel 1 package type Antenna Switching Diode Array
- Low capacitance : Max.0.35pF
- Low series resistance : rs= $1.1\Omega(Typ.)@I_F=10mA$
- ASM/FEM Module RF Switch Applications [Dual-Band Switching Diode]

Ordering Information

Type No.	Marking	Package Code
ND102M4L	AM4	12PDFN

Pin Assignment



Pin Assignment

[Top View]

ND102M4L

Absolute Maximum Ratings

(**Ta=25**°C)

Characteristic	Symbol	Rating	Unit
Continuous reverse voltage	V_R	30	V
Forward current	$ m I_F$	50	mA
Junction temperature	$T_{\rm j}$	150	°C
Storage temperature range	$T_{ m stg}$	-55 ~ 150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse voltage	V_R	$I_R = 10 \mu A$	30	-	-	V
Reverse current	I_R	$V_R = 30V$	-	-	0.1	μΑ
Forward voltage	$V_{\rm F}$	$I_F = 50 \text{mA}$	-	0.90	-	V
Total capacitance	C_{T}	$V_R = 1V$, $f = 1MHz$	-	0.3	0.35	pF
Series resistance	$r_{\rm S}$	I _F = 10mA, f= 100MHz	-	1.1	1.5	Ω
Insertion Loss	$ \mathbf{S}_{21} ^2$	$I_F = 1 \text{mA}, f = 1.8 \text{GHz}$ $I_F = 5 \text{mA}, f = 1.8 \text{GHz}$ $I_F = 10 \text{mA}, f = 1.8 \text{GHz}$	-	-0.23	-	dB
			-	-0.1	-	dB
			-	-0.08	-	dB
Isolation [Return Loss]	$ \mathbf{S}_{12} ^2$	$V_R = 0V, f = 0.9GHz$ $V_R = 0V, f = 1.8GHz$ $V_R = 0V, f = 2.4GHz$	-	-19	-	dB
			-	-14	-	dB
			-	-11	-	dB

Electrical Characteristic Curves

Fig. 1 r_s - I_F

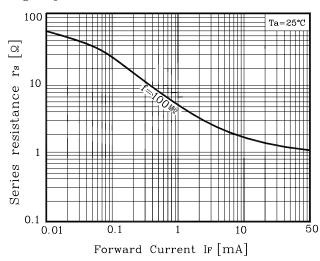


Fig. 2 C_T - V_R

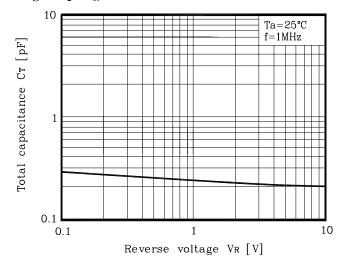


Fig. 3 I_F - V_F

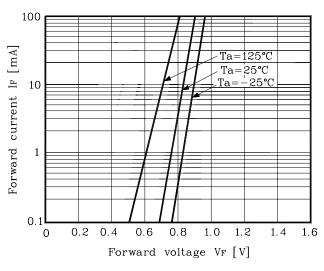


Fig. 4 Insertion Loss $|S_{21}|^2 = f(f)$

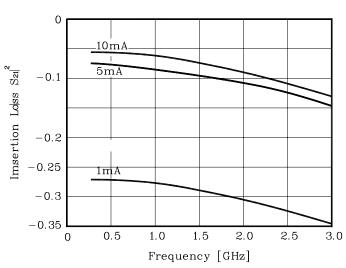
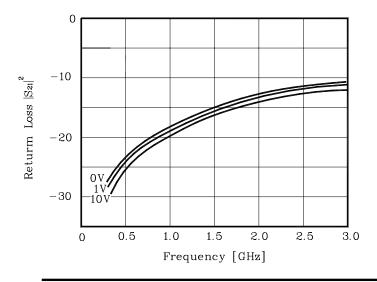
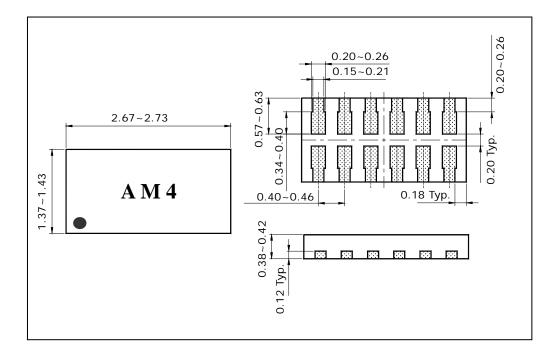


Fig. 5 Return Loss $|S_{12}|^2 = f(f)$



Outline Dimensions [unit:mm]



ND102M4L

The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).

Please make sure that you consult with us before you use these AUK Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..

Specifications mentioned in this publication are subject to change without notice.