

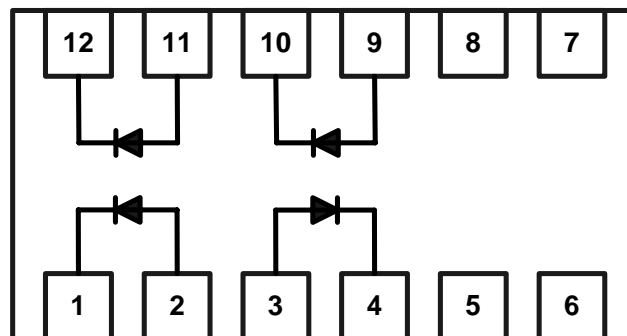
Features

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

Ordering Information

Type No.	Marking	Package Code
ND102M4AL	P6	12PDFN

Pin Assignment



Pin Assignment
[Top View]

ND102M4AL

Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Continuous reverse voltage	V_R	30	V
Forward current	I_F	50	mA
Junction temperature	T_j	150	°C
Storage temperature range	T_{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	μA
Forward voltage	V_F	$I_F = 50mA$	-	0.90	-	V
Total capacitance	C_T	$V_R = 1V, f = 1MHz$	-	0.3	0.35	pF
Series resistance	r_s	$I_F = 10mA, f = 100MHz$	-	1.1	1.5	Ω
Insertion Loss	$ S_{21} ^2$	$I_F = 1mA, f = 1.8GHz$	-	-0.23	-	dB
		$I_F = 5mA, f = 1.8GHz$	-	-0.1	-	dB
		$I_F = 10mA, f = 1.8GHz$	-	-0.08	-	dB
Isolation [Return Loss]	$ S_{12} ^2$	$V_R = 0V, f = 0.9GHz$	-	-19	-	dB
		$V_R = 0V, f = 1.8GHz$	-	-14	-	dB
		$V_R = 0V, f = 2.4GHz$	-	-11	-	dB

Electrical Characteristic Curves

Fig. 1 $r_s - I_F$

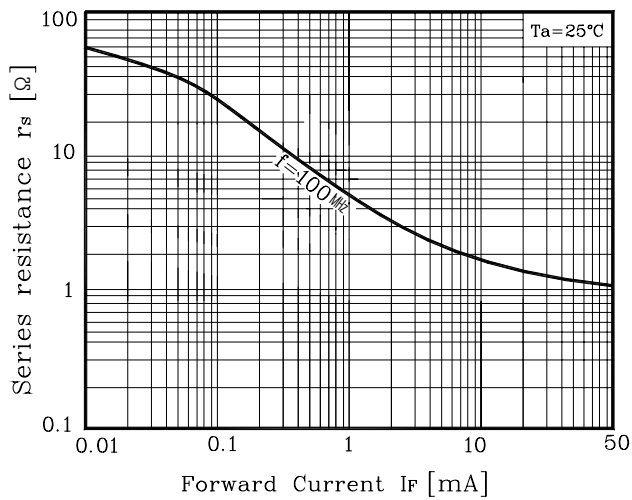


Fig. 2 $C_T - V_R$

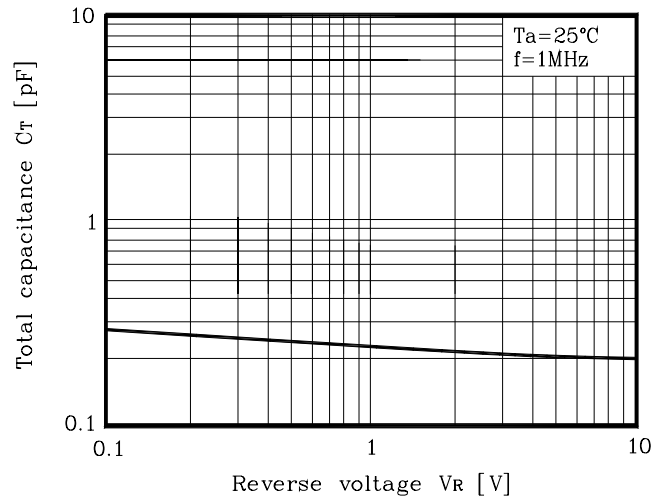


Fig. 3 $I_F - V_F$

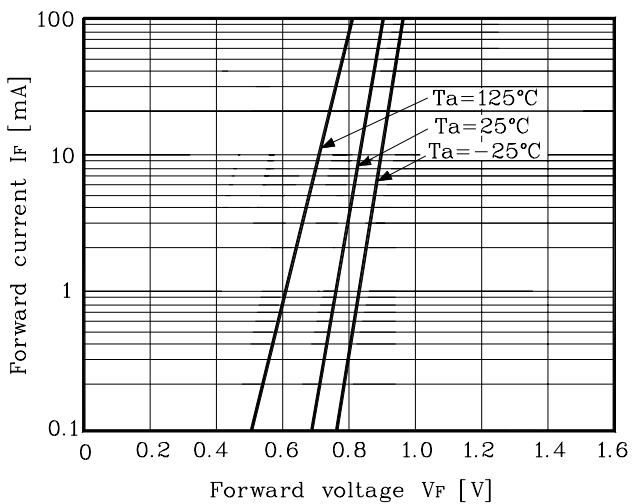


Fig. 4 Insertion Loss $|S_{21}|^2 = f(f)$

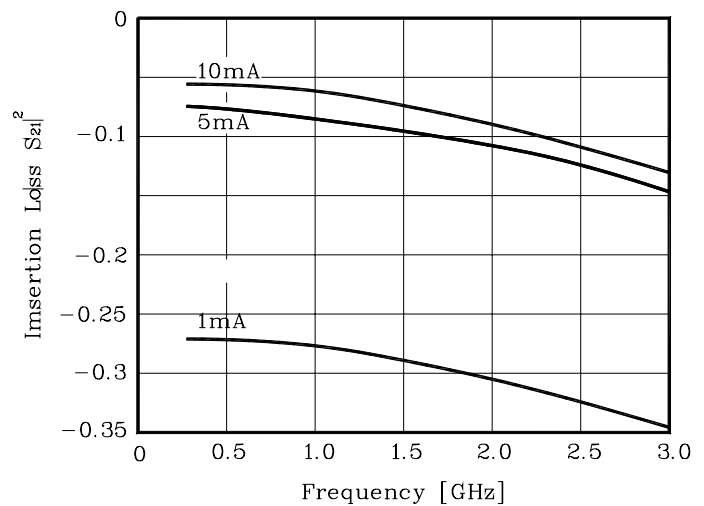
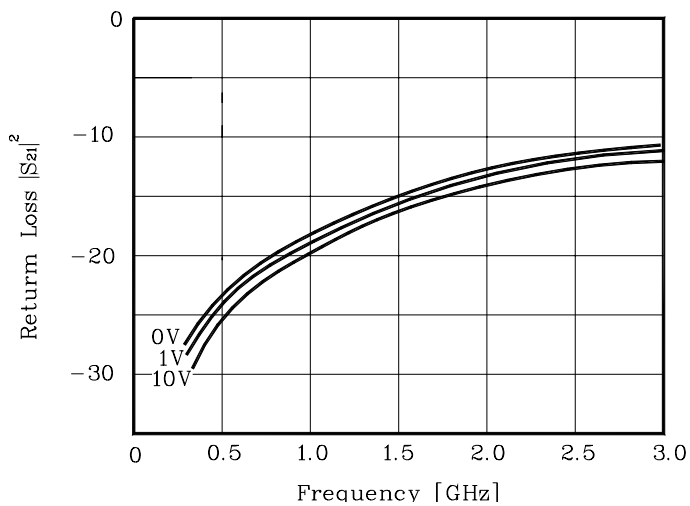
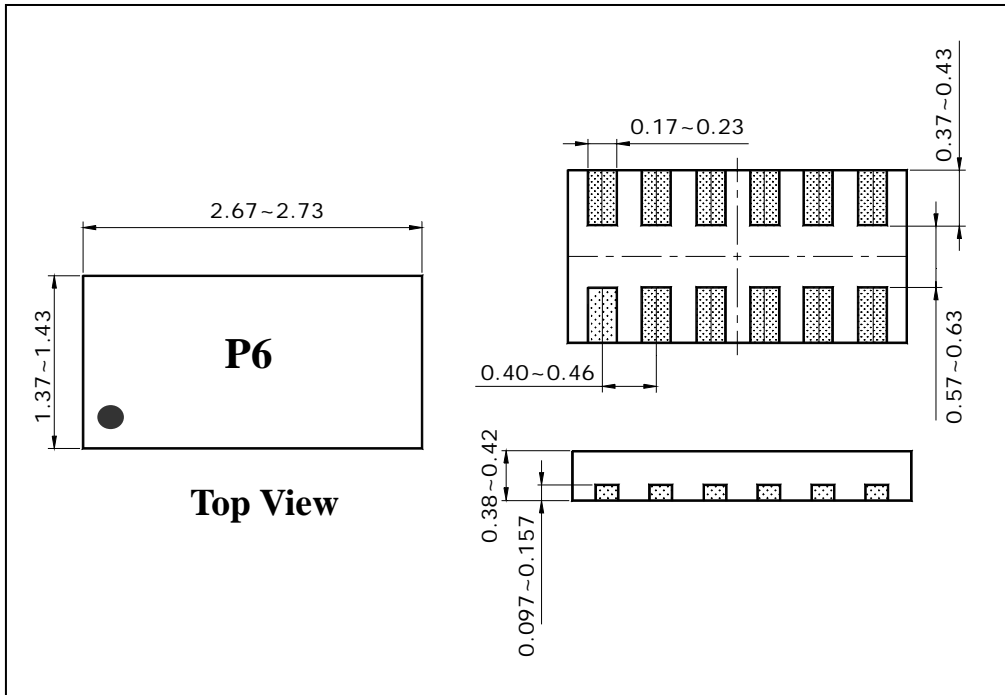


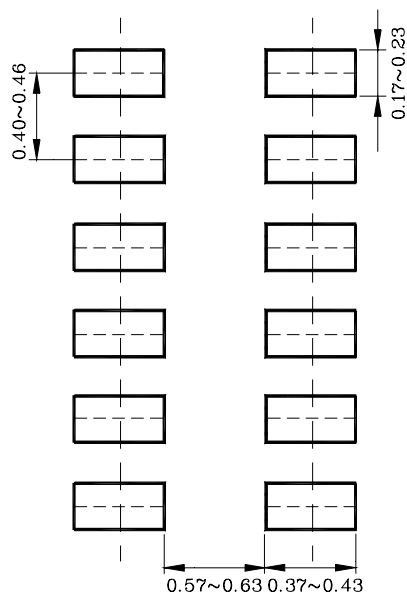
Fig. 5 Return Loss $|S_{12}|^2 = f(f)$



Outline Dimensions [unit : mm]



※ Recommend PCB solder land [Unit : mm]



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