

Low loss and low distortion for RF bandswitching

PIN Diode Series

■ Overview

Panasonic PIN Diodes are designed for AGC in antenna switches and bandswitching in tuner applications. The high efficiency (low loss/low distortion) as well as its smaller and thinner package is the most vital feature for mobile communication applications.

Panasonic PIN Diodes are suitable for designing smaller and thinner antenna switches and VCO modules.

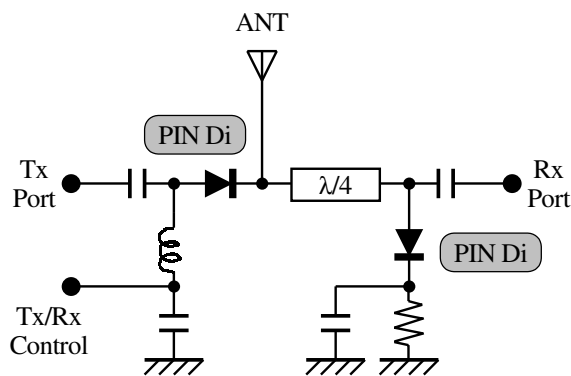
■ Features

- Lower terminal capacitance ($C_t < 0.3\text{pF}$)
- Lower dynamic resistance controlled by forward current ($R_f < 1.0\text{ohm}$)
- Lower distortion and lower harmonic distortion caused by RF leak when switching "OFF"
- Smaller and thinner package (Mold Leadless: 3-pin *tentative)

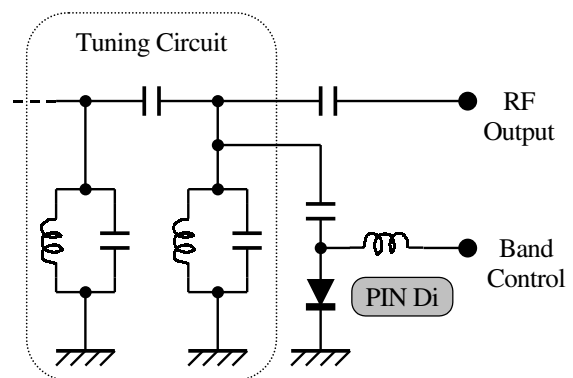
■ Applications

- RF antenna switches for mobile phones (GSM/DCS/PCS/TDMA) and Bluetooth-equipped products
- Bandswitching in high frequency modules (VCO, Duplexer)
- Bandswitching in RF switches TV and CS/BS tuners

■ Application Examples



RF Antenna SW
(SPDT SW)



Bandswitching

Products and specifications are subject to change without any notice. Please ask for the latest Product Standards to guarantee the satisfaction of your product requirements.

Semiconductor Company, Matsushita Electric Industrial Co., Ltd.

■ Lineup

Parameters Pats No.	VF max. (V)	IR max. (μA)	Ct max. (pF)	Rf max. (Ω)	Package	Remakes
	IF = 10 mA	VR = 60 V	f = 1 MHz VR = 1 V	f = 100 MHz IF = 10 mA		
MA27P01	1.0	0.1	0.8	1.0	SSSMini: 2-pin	RFSW(Low Power) High f Band SW
MA27P02	1.0	0.1	0.5	2.0		High f Band SW
MA27P06	1.0	0.1	0.55 (*)	1.0		RFSW(High Power)
MA27P07	1.0	0.1	0.35	1.5		RFSW (High Power/High f)
MA27P09	1.0	0.1	0.4	1.0		High f Band SW
MA27P10	1.0	0.1	0.3	1.2		
MA27P11	1.0	0.1	0.8 (*)	1.5		
MA26P07	1.0	0.1	0.35	1.5	Mold Leadless: 3-pin (tentative)	RFSW(High Power)
MA26P09	1.0	0.1	0.4	1.0		RFSW (High Power/High f)
MA26P10	1.0	0.1	0.3	1.2		High f Band SW
MA26P11	1.0	0.1	0.8 (*)	1.5		

(*) VR=0V

■ Package Dimensions

