

High Efficiency GaAs PA Module

Overview

A best solution for cellular-phone is "Higher efficiency" & "Smaller Size Package" Power Amplifier Module. Panasonic has original technologies of GaAs devices, and RF-circuit, so these make "Higher efficiency"& "Down-sizing" PA Module. Panasonic PA Modules will provide best solutions for also 3rd-Generation cellular phone.

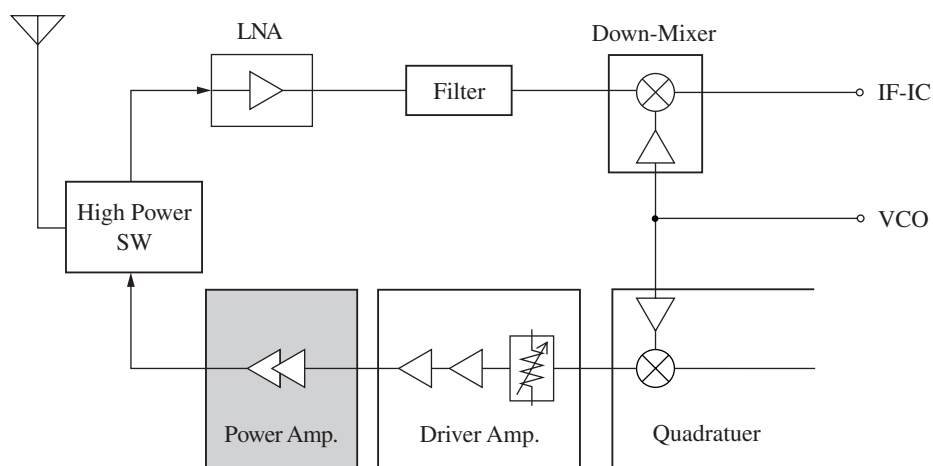
Features

- High efficiency
- High output power
- High gain

Applications

- Cellular phones

Block Diagrams



Power Amplifier Module Lineup

Japan		Global			Supply V _{DD} (V)	Package
1.5 GHz PDC	J-CDMA	AMPS/CDMA	PCS	W-CDMA		
1 429 MHz to 1 453 MHz	887 MHz to 925 MHz	824 MHz to 849 MHz	1 850 MHz to 1 910 MHz	1 920 MHz to 1 980 MHz		
UN0333H	UN0372N	-	-	UN0371 W *	3.5	PAM006
-	-	UN0371C*	UN0371P *	-	3.5	PAMP006

Note) *: Under development

¶ The 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.

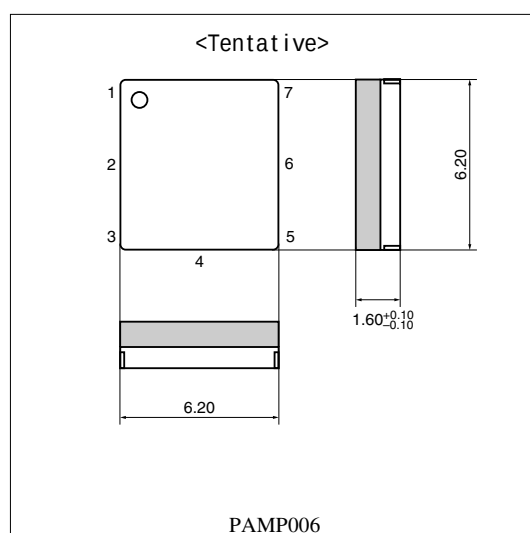
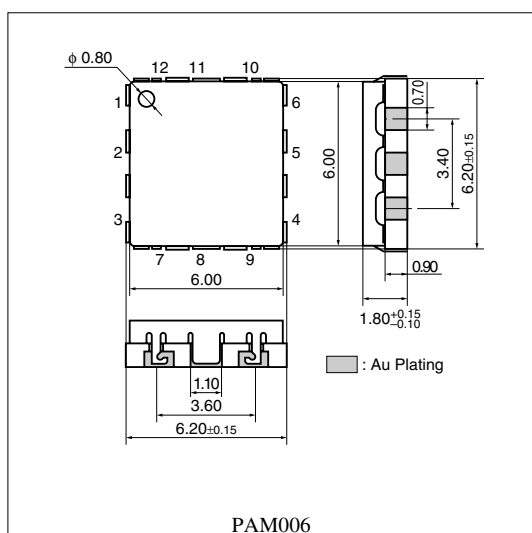
■ Characteristics $T_a = 25^\circ\text{C}$

Part No.	Application	f (GHz)	Supply Voltage	P_{OUT} (dBm)	PG (dB)	PAE	Package
UN0333H	PDC	1.5	$V_{\text{DD}} = 3.5\text{ V}$, $V_{\text{GG}} = -2.5\text{ V}$	29.5	24	typ. 58%	PAM006
UN0372N	J-CDMA	0.8	$V_{\text{CC}} = 3.5\text{ V}$, $V_{\text{REF}} = 2.8\text{ V}$	26.5 ^{*2}	27	typ. 37%	PAM006
UN0371C ^{*1}	AMPS/CDMA	0.8	$V_{\text{CC}} = 3.5\text{ V}$, $V_{\text{REF}} = 2.8\text{ V}$	28 ^{*2}	26	typ. 37%	PAMP006
UN0371P ^{*1}	PCS	1.9	$V_{\text{CC}} = 3.5\text{ V}$, $V_{\text{REF}} = 2.8\text{ V}$	28 ^{*2}	25	typ. 34%	PAMP006
UN0371W ^{*1}	W-CDMA	2.0	$V_{\text{CC}} = 3.5\text{ V}$, $V_{\text{REF}} = 2.8\text{ V}$	27	25	typ. 43%	PAM006

Note) ^{*1}: Under development

^{*2}: P_{OUT} = CDMA mode

■ Package Dimensions (Unit: mm)



Pin Description		
UN0333H		UN0372N/UN0371W
1	P_{IN}	
2	V_{DD1}	V_{CC1}
3	V_{DD2}	V_{CC2}
4	P_{OUT}	
5	GND	
6	V_{GG}	V_{REF}
7 to 12	GND	

Pin Description	
UN0371C/UN0371P	
1	V_{CC1}
2	P_{IN}
3	V_{REF}
4	V_{MODE}
5	V_{CC2}
6	P_{OUT}
7	GND