

# GaAs MMIC (Microwave Monolithic IC)

## ● GaAs MMIC for Mobile Communication Use

Block	Type No.	Functions	Main Characteristics	Applications	Package	
						No.
Low Noise Amp.	GN1025 ☆	Low noise amplifier, single positive power supply, high gain, with diversity antenna change-over switch	PG: 15dB, NF: 3dB, I <sub>DD</sub> = 3mA	Analog PDC	Mini Type 6 Pin	D16
	GN01032N	Low noise amplifier + mixer with local amplifier, high conversion gain, small current operation f = 0.9GHz	Plan of specification CG: 20dB NF: 4.5dB I <sub>DD</sub> = 5mA	PHS general purpose	SSONF-10D	D85
	△GN01034N	Low noise amplifier + mixer with local amplifier, high conversion gain, small current operation f = 0.9GHz	Plan of specification CG: 18dB NF: 4.5dB I <sub>DD</sub> = 5mA	Analog general purpose	SSONF-10D	D85
	△GN01028B ☆	Low noise amplifier with AGC function + mixer with local amplifier f = 0.9GHz	CG: 25dB, I <sub>DD</sub> = 10mA, NF: 2.7dB, △CG: 30dB	GSM Analog PDC	SSONF-10D	D85
	△GN01019B ☆	Low noise amplifier with AGC function, small current operation f = 0.9GHz	PG: 18dB, I <sub>D</sub> = 7mA, NF: 2.3dB, △CG: 30dB	Analog PDC	Mini Type 6 Pin	D16
Pre-amp.	GN1010	Negative feedback wide-band amplifier (with frequency band control condenser external connection terminal)	PG: 10dB, NF: 2dB I <sub>DD</sub> = 5 ~ 45mA	General purpose	Mini Type 4 Pin	D13
	GN1017 ☆	Low noise amplifier with AGC function, single positive power supply, low distortion characteristic	PG1: 10dB, I <sub>D</sub> : 20mA, PG2: -20dB, P <sub>in</sub> = -15dBm DM: -68dBc	GSM PDC PHS CDMA	Mini Type 6 Pin	D16
	GN01037B ☆	Low noise amplifier with AGC function, PA directly connectable, temperature characteristic improved type	PG1: 26dB, I <sub>D</sub> : 30mA PG2: -14dB, P <sub>in</sub> = -15dBm DM: -60dBc	GSM PDC PHS CDMA	Mini Type 6 Pin	D16
	GN01038B ☆	Low noise amplifier with AGC function, small current and temperature characteristics improved version of GN1017	PG1: 12dB, I <sub>D</sub> : 12mA PG2: -25dB, P <sub>in</sub> = -15dBm DM: -65dBc	GSM PDC PHS CDMA	Mini Type 6 Pin	D16
Mixer	GN2011	Double balanced FET, mixer (with external connection balancer), high conversion gain, low noise	IP3: 23dBm, NF: 5.5dB I <sub>idle</sub> : 3mA	Analog PDC general purpose	Mini Type 6 Pin	D16
	GN2012 ☆	Mixer single positive power supply, high conversion gain, low distortion (IP3), low noise	IP3: 12dBm, I <sub>D</sub> : 5mA, CG: 12dB, NF = 4dB	Analog PDC general purpose	S Mini Type 5 Pin	D8
	GN02018B ☆	Mixer with local amplifier, high conversion gain, low noise, low distortion (IP3), single positive power supply	IP3: 12dBm, I <sub>D</sub> : 7mA CG: 13dB	Analog PDC	Mini Type 6 Pin	D16
Distributor Amp.	GN1051	With coupled circuit on input side, small current consumption, high reverse isolation characteristics	P <sub>out</sub> = -3dBm S <sub>12</sub> /S <sub>13</sub> : 35dB I <sub>DD</sub> = 3.6mA	Analog GSM PDC	Mini Type 6 Pin	D16
Switch	GN4002	SPDT switch, -3 ~ -8 in switching voltage, small package version of GN04005	Loss: 0.6dB ISO: 30dB $\left( \begin{array}{l} V_{con} = 0/-5V \\ P_{in} = 0dBm \\ f = 1GHz \end{array} \right)$	PHS PDC	Mini Type 6 Pin	D16
	△GN4003	SPST switch, single switching type, -3 ~ -8V in switching voltage	P1dB: 25dBm, Loss: 0.6dB, ISO: 20dB		Mini Type 6 Pin	D16
	GN4004 ☆	SPDT switch, +3 ~ +8V in switching voltage, high output, single positive power supply operation	Loss: 0.6dB ISO: 27dB $\left( \begin{array}{l} V_{con} = 0/3V \\ P_{in} = 32dBm \\ f = 1GHz \end{array} \right)$	PDC GSM CDMA	SSONF-10D	D85
	GN04005	SPDT switch, -3 ~ -8V in switching voltage, low insertion loss, high isolation	Loss: 0.6dB ISO: 25dB $\left( \begin{array}{l} V_{con} = 0/-5V \\ P_{in} = 22dBm \\ f = 1GHz \end{array} \right)$	PHS PDC	SSONF-10D	D85

△Tentative ☆Ferro electric capacitor integrated