



About SuperApex

SuperApex, LLC is a RF/Microwave/Millimeter-wave company located in the suburb of Chicago, USA. We provide the innovative GaAs MMIC products, RF/Microwave/Millimeter-wave modules and chip packaging solutions and services for our customers around the world. We have completely proprietary intellectual property rights for all the product which we design and manufacture. SuperApex works with our customers from feasibility concepts through to product introductions and supply. The company prides itself on working closely with its clients and developing long-term partnerships which offers success to all parties.

- ◆ Expertise in the design & development of components and subsystems in RF, Microwave and Millimeter wave markets
- ◆ DC-65 GHz: RF, microwave & mm-wave
- ◆ Technology: GaAs and GaN
- ◆ MMICs, packaging, modules, and sub-systems

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Catalog

| | |
|--|----|
| 1 Low Noise Amplifier | 3 |
| 1.1 Broadband Low Noise Amplifier | 3 |
| 1.2 General Low Noise Amplifier (f<8GHz) | 3 |
| 1.3 General Low Noise Amplifier (f≥8GHz) | 4 |
| 1.4 Broadband Distributed Amplifier | 5 |
| 2 Power Amplifier | 5 |
| 3 Drive Amplifier | 6 |
| 4 Switch | 7 |
| 5 Phase Shifter | 8 |
| 6 Attenuator | 9 |
| 7 Mixer | 9 |
| 8 Power Divider | 10 |
| 9 Multifunction Chip | 10 |
| 10 Amplitude Equalizer | 11 |
| 11 Power Detector | 11 |
| 12 Transistor | 11 |
| 13 Spiral Inductor | 12 |
| 14 Module | 12 |

1 Low Noise Amplifier

1.1 Broadband Low Noise Amplifier

| Model Number/Index | Freq (GHz) | Gain (dB) | Gain Flatness (dB) | Noise Figure (dB) | Input VSWR(:1) | Output VSWR(:1) | Output P _{1dB} (dBm) | Power Supply (V/mA) | Die or QFN |
|--------------------------|------------|-----------|--------------------|-------------------|----------------|-----------------|-------------------------------|---------------------|------------|
| ^{NEW} SAC4003Q3 | 0.0005~3 | 26 | ±1 | 1.2 | 2 | 2 | 20 | 5/130 | QFN3x3 |
| SAC3074QP3 | 0.02~1 | 29 | ±0.75 | 0.4 | 2 | 2 | 20 | 5/65 | QFN3x3 |
| SAC3055 | 0.01~2 | 22 | ±1.5 | 0.8 | 1.4 | 1.4 | 20 | 5/100 | Bare die |
| SAC3055QP3 | 0.01~2 | 22 | ±1.5 | 0.8 | 1.4 | 1.4 | 20 | 5/100 | QFN3x3 |
| SAC3074 | 0.02~1 | 29 | ±0.75 | 0.4 | 2 | 2 | 20 | 5/65 | Bare die |
| SAC3074Q3 | 0.02~1 | 29 | ±0.75 | 0.4 | 2 | 2 | 20 | 5/65 | QFN3x3 |
| SAC3050 | 0.02~6 | 20 | ±1 | 0.9 | 1.5 | 1.5 | 19 | 5/68 | Bare die |
| SAC3050Q3 | 0.02~6 | 20 | ±1 | 1 | 1.5 | 1.5 | 19 | 5/68 | QFN3x3 |
| SAC3050QP3 | 0.02~6 | 20 | ±1 | 1 | 1.5 | 1.5 | 19 | 5/68 | QFN3x3 |
| SAC3081QP3 | 0.02~8 | 24 | ±1 | 1.3 | 1.5 | 1.5 | 13 | 5/55 | QFN3x3 |
| SAC3085QP3 | 0.02~8 | 18 | ±1.5 | 1.3 | 1.5 | 1.5 | 17 | 5/80 | QFN3x3 |
| SAC3002A | 0.03~0.3 | 31 | ±0.1 | 0.7 | 1.4 | 1.4 | 20 | 5/75 | Bare die |
| SAC3087QP3 | 0.03~3 | 24 | ±1 | 0.9 | 1.5 | 1.5 | 19 | 5/80 | QFN3x3 |
| SAC3089QP3 | 0.03~3.5 | 20 | ±1.3 | 0.9 | 1.5 | 1.5 | 17 | 5/35 | QFN3x3 |
| SAC3077Q3 | 0.05~6 | 14 | ±4 | 1.5 | 1.5 | 1.5 | 14 | 5/50 | QFN3x3 |
| SAC3008B | 0.4~6 | 18 | ±1 | 1.2 | 1.5 | 1.5 | 17.5 | 5/58 | Bare die |
| SAC3070 | 0.7~18 | 15 | ±2 | 2 | 1.85 | 1.85 | 10 | 5/50 | Bare die |
| SAC3042 | 1.0~12.0 | 20.5 | ±0.9 | 2.3 | 1.3 | 1.6 | 16 | 5/60 | Bare die |
| SAC3091QP3 | 1.5~8.5 | 27 | ±1 | 0.7 | 1.5 | 1.5 | 9 | 4/20 | QFN3x3 |
| SAC3042Q4 | 1~12 | 20.5 | ±0.9 | 2.3 | 1.3 | 1.6 | 16 | 5/60 | QFN4x4 |
| SAC3062 | 1~12 | 18 | ±2 | 1.6 | 1.4 | 1.4 | 15 | 5/60 | Bare die |
| SAC3062Q3 | 1~12 | 18 | ±2 | 1.6 | 1.4 | 1.4 | 15 | 5/60 | QFN3x3 |
| SAC3080Q3 | 1~7 | 12 | ±1 | 2.5 | 1.5 | 1.5 | 15 | 5/60 | QFN3x3 |
| SAC3037 | 1~7 | 11 | ±0.4 | 3 | 1.6 | 1.6 | 18.2 | 8/60 | Bare die |
| SAC3038 | 1~7 | 10.5 | ±0.6 | 3.4 | 1.5 | 1.5 | 17.5 | 8/67 | Bare die |
| SAC3058 | 1~9 | 19 | ±1.5 | 1.1 | 1.5 | 1.5 | 19 | 5/65 | Bare die |
| SAC3084QP3 | 2~8 | 27 | ±1 | 0.65 | 1.5 | 1.5 | 13 | 5/40 | QFN3x3 |

1.2 General Low Noise Amplifier (f<8GHz)

| Model Number/Index | Freq (GHz) | Gain (dB) | Gain Flatness (dB) | Noise Figure (dB) | Input VSWR(:1) | Output VSWR(:1) | Output P _{1dB} (dBm) | Power Supply (V/mA) | Die or QFN |
|--------------------|------------|-----------|--------------------|-------------------|----------------|-----------------|-------------------------------|---------------------|------------|
| SAC3003Q3 | 0.2~0.6 | 38 | ±0.3 | 0.8 | 1.6 | 1.6 | 17 | 5/75 | QFN3x3 |
| SAC3003 | 0.2~0.6 | 38 | ±0.15 | 0.8 | 1.6 | 1.6 | 17 | 5/75 | Bare die |
| SAC3005Q3 | 0.4~0.6 | 35.5 | ±0.4 | 0.6 | 1.6 | 1.6 | 18 | 5/75 | QFN3x3 |
| SAC3005 | 0.4~0.6 | 35.5 | ±0.4 | 0.6 | 1.6 | 1.6 | 18 | 5/75 | Bare die |
| SAC3059 | 0.4~0.6 | 35.5 | ±0.5 | 0.5 | 1.4 | 1.3 | 15 | 5/80 | Bare die |
| SAC3053 | 0.4~1.5 | 21 | ±1.0 | 1.6 | 1.6 | 1.6 | 21 | 5/115 | Bare die |
| SAC3054B | 0.4~2.1 | 27 | 1 | 1.2 | 1.3 | 1.3 | 14 | 5/50 | Bare die |

| Model Number/Index | Freq (GHz) | Gain (dB) | Gain Flatness (dB) | Noise Figure (dB) | Input VSWR(:1) | Output VSWR(:1) | Output P ₁ dB (dBm) | Power Supply (V/mA) | Die or QFN |
|--------------------------|------------|-----------|--------------------|-------------------|----------------|-----------------|--------------------------------|---------------------|------------|
| SAC3054BQP3 | 0.4~2.1 | 27 | ±1 | 1.2 | 1.3 | 1.3 | 14 | 5/50 | QFN3x3 |
| SAC3057 | 0.4~3.6 | 28 | ±0.5 | 1 | 1.3 | 1.4 | 14 | 5/72 | Bare die |
| SAC3073 | 0.7~2.6 | 21 | ±1.5 | 1 | 1.8 | 1.5 | 18 | 5/75 | Bare die |
| ^{NEW} SAC4000Q3 | 0.7~3.5 | 22 | ±1 | 0.5 | 1.8 | 1.5 | 15@3V | 3~5/45~75 | QFN3x3 |
| SAC3063Q3 | 0.8~1.6 | 30 | ±1.5 | 0.4 | 1.6 | 1.6 | 12 | 5/50 | QFN3x3 |
| SAC3063QP3 | 0.8~1.6 | 30 | ±1.5 | 0.4 | 1.6 | 1.6 | 12 | 5/50 | QFN3x3 |
| SAC3099Q3 | 0.8~2.5 | 36 | ±1 | 0.6 | 1.5 | 1.5 | 16 | 5/70 | QFN3x3 |
| SAC3013Q3 | 0.9~1.5 | 17 | ±1.1 | 0.7 | 1.5 | 1.5 | 12 | 5/40 | QFN3x3 |
| SAC3013 | 0.9~1.5 | 17 | ±1.1 | 0.7 | 1.5 | 1.5 | 12 | 5/40 | Bare die |
| ^{NEW} SAC4001Q3 | 0.9~3 | 33 | ±1 | 0.4 | 1.5 | 1.5 | 16 | 5/55 | QFN3x3 |
| SAC3098Q3 | 1~2 | 28 | ±1 | 0.5 | 1.8 | 1.5 | 5 | 5/13 | QFN3x3 |
| SAC3056 | 2~4 | 29 | ±0.5 | 0.5 | 1.4 | 1.4 | 9 | 5/30 | Bare die |
| SAC3056B | 2~4 | 30 | ±0.75 | 0.5 | 1.5 | 1.5 | 13 | 5/30 | Bare die |
| SAC3056QP3 | 2~4 | 29 | ±1 | 0.5 | 1.6 | 1.6 | 12 | 5/30 | QFN3x3 |
| SAC3078QP3 | 2~6 | 26 | ±1 | 0.8 | 1.5 | 1.5 | 14 | 5/60 | QFN3x3 |
| SAC3076Q3 | 4.5~6 | 24 | ±1 | 0.8 | 1.5 | 1.5 | 11 | 5/60 | QFN3x3 |

1.3 General Low Noise Amplifier ($f \geq 8\text{GHz}$)

| Model Number/Index | Freq (GHz) | Gain (dB) | Gain Flatness (dB) | Noise Figure (dB) | Input VSWR (:1) | Output VSWR (:1) | Output P ₁ dB (dBm) | Power Supply (V/mA) | Die or QFN |
|----------------------------|------------|-----------|--------------------|-------------------|-----------------|------------------|--------------------------------|-----------------------|------------|
| SAC3095QP3 | 2~8 | 23~28 | ±1 | 0.6 | 1.5 | 1.5 | 10@3V | 3~5/25~45 | QFN3x3 |
| SAC3086QP3 | 10~13 | 18 | ±1 | 1.1 | 1.7 | 1.7 | 5 | 3/8; 4/11 | QFN3x3 |
| SAC3086IQP3 (Dual Channel) | 10~13 | 18 | ±1 | 1.1 | 1.7 | 1.7 | 5 | 3/8; 4/11 (Every way) | QFN3x3 |
| ^{NEW} SAC4004 | 11~26 | 18 | ±0.5 | 1.8 | 1.5 | 1.8 | 5.5 | 5/18 | Bare die |
| SAC3088Q3 | 12~20 | 18 | ±1 | 1.3 | 1.5 | 1.5 | 7 | 5/15 | QFN3x3 |
| SAC3088I | 14~18 | 18 | ±1 | 1.1 | 1.5 | 1.5 | 0 | 4/11 | Bare die |
| SAC3088QP3 | 14~18 | 18 | ±1 | 1.3 | 1.5 | 1.5 | 0 | 4/8 | QFN3x3 |
| SAC3088IQP3 (Dual Channel) | 14~18 | 18 | ±1 | 1.3 | 1.6 | 1.6 | 0 | 4/8 (Every way) | QFN3x3 |
| SAC3092 | 18~40 | 18 | ±1 | 2.5 | 1.7 | 2 | 12 | 5/100 | Bare die |
| SAC3093 | 18~40 | 18 | ±1 | 2.8 | 1.7 | 2 | 12 | 5/100 | Bare die |
| SAC3096QP3 | 2~8 | 30 | ±1 | 0.6 | 1.5 | 1.5 | 17 | 5/60 | QFN3x3 |
| SAC3043 | 6~18 | 22 | ±0.6 | 1.5 | 1.3 | 1.4 | 14 | 5/55 | Bare die |
| SAC3043Q4 | 6~18 | 23.5 | ±1.5 | 1.5 | 1.3 | 1.3 | 15 | 5/55 | QFN4x4 |
| SAC3066 | 7~11 | 23 | ±1 | 1.1 | 1.5 | 1.5 | 18.5 | 5/29 | Bare die |
| SAC3066Q3 | 7~11 | 21.5 | ±1.5 | 1.2 | 1.7 | 1.7 | 16 | 5/42 | QFN3x3 |
| SAC3094QP3 | 7~13 | 22 | ±1 | 0.8 | 1.5 | 1.5 | 8@3V | 3~5/20~40 | QFN3x3 |
| SAC3039 | 7~13 | 20 | ±0.8 | 1.35 | 1.4 | 1.4 | 14 | 5/35 | Bare die |
| SAC3039Q3 | 7~13 | 20 | ±1.5 | 1.3 | 1.3 | 1.4 | 14 | 5/30 | QFN3x3 |
| SAC3083QP3 | 7~13 | 20 | ±1.5 | 1 | 1.5 | 1.5 | 11 | 5/25 | QFN3x3 |
| SAC3097 | 7~9 | 26 | ±1 | 0.6 | 1.5 | 1.5 | 17 | 5/60 | Bare die |
| SAC3052 | 8~12 | 22 | N/A | 1.3 | 1.2 | 1.2 | 14 | 5/32 | Bare die |

1.4 Broadband Distributed Amplifier

| Model Number/Index | Freq (GHz) | Gain (dB) | Gain Flatness (dB) | Noise Figure (dB) | Input VSWR (:1) | Output VSWR (:1) | Output P ₁ dB (dBm) | Power Supply (V/mA) | Die or QFN |
|--------------------|------------|-----------|--------------------|-------------------|-----------------|------------------|--------------------------------|---------------------|------------|
| SAC3045Q5 | 2~20 | 15.5 | ±1.0 | 3 | 1.25 | 1.4 | 14 | 5/60 | QFN5x5 |
| SAC3036 | 3.0~6.5 | 20 | ±1 | 2.8 | 1.4 | 1.3 | 15 | 5/60 | Bare die |
| SAC3940 | 0.01~50 | 8 | ±1.5 | 6 | 1.6 | 1.5 | 13 | 8/100/-VG | Bare die |
| SAC3946 | 0.01~55 | 10 | ±1.5 | 6 | 1.6 | 1.5 | 15 | 8/115/-VG | Bare die |
| SAC3045 | 2~20 | 16 | ±1 | 3 | 1.3 | 1.3 | 14 | 5/60 | Bare die |
| SAC3051 | DC~22 | 16 | ±1 | 3 | 1.3 | 1.3 | 14 | 8/60/-VG | Bare die |
| SAC3051Q5 | DC~22 | 16 | ±1 | 3 | 1.5 | 1.5 | 14 | 8/60/-VG | QFN5x5 |
| SAC3064 | DC~30 | 13 | ±2 | 4 | 1.5 | 1.3 | 23 | 8/220/-VG | Bare die |
| SAC3064Q5 | DC~30 | 13 | ±2 | 4 | 1.6 | 1.4 | 23 | 8/220/-VG | QFN5x5 |
| NEW SAC4008 | 28~55 | 17 | ±1 | 3.5 | 2.0 | 1.5 | 15 | 5/114 | Bare die |

2 Power Amplifier

| Model Number /Index | Freq (GHz) | Gain (dB) | Output P ₁ dB (dBm) | PAE(%) | Third-Order Intermodulation (dBc) | Power Supply (V/A) | Die or QFN |
|-----------------------|-------------|-----------|--------------------------------|--------|-----------------------------------|--------------------|------------|
| SAC3122 | 0.001~3 | 25.5 | 30 | 40 | N/A | 12/-VG | Bare die |
| SAC3122QP4 | 0.001~3 | 25 | 30 | 40 | N/A | 12/-VG | QFN4x4 |
| SAC3125Q6 | 0.1~2 | 15 | 38 | 45 | N/A | 28/-VG | QFN6x6 |
| NEW SAC3157 | 2.5~8.5 | 28 | 36 | 20 | N/A | 8/2.5 | Bare die |
| SAC3145 | 2~6 | 21 | 30 | 29 | N/A | 8/0.45 | Bare die |
| SAC3146 | 2~6 | 19 | 33 | 27 | N/A | 8/0.96 | Bare die |
| NEW SAC3156 | 2~8.5 | 18 | 29 | 20 | N/A | 7/0.6 | Bare die |
| SAC3144 | 4.5~6 | 22 | 37 | 30 | N/A | 5/3.4 | Bare die |
| SAC3119 | 5.5~6 | 23 | 36 | 40 | N/A | 5/-VG | Bare die |
| SAC3109Q6 | 5~6 | 34 | 35 | 40 | N/A | 8/-VG | QFN6x6 |
| NEW SAC3154 | 5~8 | 23 | 39 | 24 | N/A | 8/2.5 | Bare die |
| SAC3147 | 6~8 | 20 | 39 | 30 | N/A | 8/3.5 | Bare die |
| SAC3113B | 8.5~11 | 24 | 40 (P ₃ dB) | 30 | N/A | 8/3 | Bare die |
| SAC3143 | 8~10 | 21 | 24 | 32 | N/A | 7/3.5 | Bare die |
| NEW SAC3149CR5 | 8~11 | 23 | 37 | 35 | N/A | 8/1.6 | Carrier |
| NEW SAC3149Q6 | 8~11 | 23 | 20 | 30 | N/A | 8/1.6 | QFN6x6 |
| NEW SAC3153 | 8~12 | 24 | 39 | 40 | N/A | 7/2 | Bare die |
| NEW SAC3151 | 12.7~15.5 | 20 | 39 | 35 | N/A | 8/2.2 | Bare die |
| SAC3116A | 13.5~14.5 | 30 | 38 | 32 | N/A | 7/1.4~3 | Bare die |
| SAC3142Q10 | 13.75~14.5 | 27 | 40.5 | 30 | N/A | 7/4 | QFN10x10 |
| SAC3142CR4 | 13.75~14.5 | 27 | 40.5 | 30 | N/A | 8/4 | Carrier |
| SAC3116AQP6 | 13.75~14.75 | 30 | 38 | 32 | -25/(30dBm/Tone) | 7/-VG | QFN6x6 |
| SAC3117AQP5 | 13.75~14.75 | 29 | 33 | 40 | -24/(25dBm/Tone) | 7/-VG | QFN5x5 |
| SAC3133B | 14~18 | 21 | 38 | 32 | -25/(30dBm/Tone) @16GHz | 8/3 | Bare die |

| Model Number /Index | Freq (GHz) | Gain (dB) | Output P ₁ dB (dBm) | PAE(%) | Third-Order Intermodulation (dBc) | Power Supply (V/A) | Die or QFN |
|------------------------|------------|-----------|--------------------------------|--------|-----------------------------------|--------------------|------------|
| SAC3138 | 14~18 | 18 | 31 | 30 | -27/(26dBm/Tone) @16GHz | 5/-VG | Bare die |
| ^{NEW} SAC3155 | 15~17 | 22 | 33 | 33 | N/A | 5/1 | Bare die |
| ^{NEW} SAC3152 | 15~17 | 20 | 38 | 30 | N/A | 7/2 | Bare die |
| SAC3126 | 18~26.5 | 23 | 32 | 22 | N/A | 6/-VG | Bare die |
| SAC3136 | 18~29 | 16 | 32 | 20 | N/A | 6/-VG | Bare die |
| SAC3148 | 22~25 | 22 | 34 | N/A | N/A | 6/2 | Bare die |
| SAC3140A | 27.5~31 | 24 | 39 | 24 | N/A | 6/5 | Bare die |
| SAC3127A | 27.5~31 | 27 | 36 | 25 | -25/(27dBm/Tone) | 6/-VG | Bare die |
| SAC3127AQ6 | 27.5~31 | 27 | 35.5 | 22 | -25/(27dBm/Tone) | 6/-VG | QFN6x6 |
| SAC3124 | 33.5~36.5 | 25 | 35 | 20 | N/A | 6/2.5 | Bare die |
| SAC3129A | 37~40 | 20 | 30 | 20 | N/A | 6/-VG | Bare die |

3 Drive Amplifier

| Model Number/Index | Freq (GHz) | Gain (dB) | Gain Flatness (dB) | Noise Figure (dB) | Input VSWR (:1) | Output VSWR (:1) | Output P ₁ dB (dBm) | Power Supply (V/mA) | Die or QFN |
|------------------------|------------|-----------|--------------------|-------------------|-----------------|------------------|--------------------------------|---------------------|------------|
| SAC3908Q3 | 0.1~4 | 15 | ±1 | 4 | 1.5 | 1.5 | 26.5@1GHz | 5~8/100/-VG | QFN3x3 |
| SAC3903 | 0.9~1.3 | 36 | ±0.5 | 3.2 | 1.8 | 1.8 | 25.5 | 8/162 | Bare die |
| SAC3908 | 0.1~4 | 14 | ±1 | 4 | 1.5 | 1.5 | 26 | 8/150 | Bare die |
| SAC3937AQP4 | 0.03~3 | 16 | ±0.5 | - | 1.5 | - | 30 | 12/360 | QFN4x4 |
| SAC3906 | 3~10 | 18 | ±1 | N/A | 1.3 | 1.4 | 13 | 5/63 | Bare die |
| SAC3913BQ4 | 7.9~9 | 24 | ±1 | N/A | 1.3 | 1.8 | 28 | 8/230 | QFN4x4 |
| SAC3916 | 12~18 | 22 | ±1.25 | N/A | 1.5 | 1.5 | 31 | 6/1000 | Bare die |
| SAC3945A | 18~45 | 15 | ±1.5 | 8 | 1.35 | 1.35 | 25 | 5/450 | Bare die |
| ^{NEW} SAC3952 | 26~45 | 15 | ±1.5 | 8 | 1.35 | 1.35 | 27 | 5/800 | Bare die |
| SAC3947QP3 | 0.03~2 | 17 | ±0.75 | 1.7 | 1.6 | 1.6 | 27 | 8/270 | QFN3x3 |
| SAC3939Q4 | 0.03~6 | 16 | 1 | N/A | N/A | N/A | 27 | 12/160 | QFN4x4 |
| SAC3904Q3 | 7~12 | 24 | 1.5 | 5.5 | N/A | N/A | 17.5 | 5/68 | QFN3x3 |
| SAC3907 | 26~38 | 16 | ±1 | N/A | 1.7 | 1.4 | 26 | 6/450 | Bare die |
| SAC3930Q3 | 0.05~1 | 12 | ±1 | 2.5 | 1.5 | 1.5 | 18 | 5/80 | QFN3x3 |
| SAC3928Q3 | 0.05~1.5 | 10 | ±1 | 3.5 | 1.5 | 1.5 | 17 | 5/80 | QFN3x3 |
| SAC3938QP3 | 0.05~6 | 10 | ±1 | 5.5 | 1.5 | 1.5 | 20 | 5~8/100 | QFN3x3 |
| SAC3901AQP3 | 0.9~1.3 | 20 | ±0.5 | 4 | 1.5 | 2.2 | 26 | 5/180 | QFN3x3 |
| SAC3934Q3 | 0.05~3 | 13 | ±0.75 | 3 | 1.75 | 1.75 | 28 | 8~12/200 | QFN3x3 |
| SAC3932QP3 | 0.05~6 | 15 | ±1.5 | 3 | 1.75 | 1.75 | 28 | 8~12/150 | QFN3x3 |
| SAC3933Q3 | 0.5~6 | 12 | ±1.5 | 2 | 1.75 | 1.75 | 18 | 5/80 | QFN3x3 |
| SAC3918 | 2~10 | 18 | N/A | 5.5 | 1.4 | 1.2 | 19 | 5/80 | Bare die |
| SAC3918Q3 | 2~10 | 18 | ±1.5 | N/A | 1.7 | 1.3 | 19 | 5/80 | QFN3x3 |
| SAC3913 | 8~13 | 19 | ±2 | N/A | 1.4 | 1.4 | 32.5 | 5~6/650 | Bare die |
| SAC3913Q5 | 8~13 | 19 | ±2 | N/A | 2 | 1.7 | 32 | 5~6/650 | QFN5x5 |
| SAC3923 | 1~20 | 11 | ±1.2 | 3 | 1.6 | 1.3 | 28.5 | 10/330 | Bare die |
| SAC3915 | 6~18 | 17 | ±0.75 | 5 | 1.5 | 1.5 | 20 | 6/80 | Bare die |

| Model Number/Index | Freq (GHz) | Gain (dB) | Gain Flatness (dB) | Noise Figure (dB) | Input VSWR (:1) | Output VSWR (:1) | Output P ₁ dB (dBm) | Power Supply (V/mA) | Die or QFN |
|------------------------|------------|-----------|--------------------|-------------------|-----------------|------------------|--------------------------------|---------------------|------------|
| SAC3915Q3 | 6~18 | 18 | ±1 | N/A | 1.6 | 1.5 | 18 | 6/80 | QFN3x3 |
| SAC3917 | 6~18 | 16 | ±0.5 | 3.5 | 1.4 | 1.4 | 16 | 5/52 | Bare die |
| SAC3916Q5 | 12~18 | 22 | ±1.2.5 | N/A | 1.5 | N/A | 31 | 6/1000 | QFN5x5 |
| SAC3914 | 14~18 | 19 | ±2 | N/A | 2 | N/A | 31 | 5~6/500 | Bare die |
| SAC3914Q4 | 14~18 | 19 | ±2 | N/A | 2 | N/A | 31 | 5~6/500 | QFN4x4 |
| SAC3912 | 20~38 | 8 | ±0.75 | 5 | 1.3 | 1.3 | 18 | 4~6/100 | Bare die |
| SAC3910 | 22~38 | 15 | ±0.75 | 6.5 | 1.6 | 1.6 | 24 | 5/250 | Bare die |
| SAC3911 | 24~40 | 12 | ±1 | 5 | 1.4 | 1.4 | 15 | 4/60 | Bare die |
| SAC3925 | 26~38 | 16 | ±1 | N/A | 1.7 | 1.4 | 26 | 6/300 | Bare die |
| SAC3935 | 42~47 | 18 | ±2 | 9 | 1.6 | 1.6 | 20 | 5/200 | Bare die |
| ^{NEW} SAC3953 | 54~58 | 18 | ±2 | 9 | 1.6 | 1.6 | 20 | 5/350 | Bare die |
| ^{NEW} SAC3955 | 47~58.5 | 14 | ±1.5 | 10 | 1.35 | 1.35 | 20 | 6/550 | Bare die |

4 Switch

| Model Number /Index | Freq (GHz) | Switch Configuration | Insertion Loss (dB) | Isolation (dB) | Return Loss (dB)(ON) | Return Loss (dB)(OFF) | Input P ₁ dB (dBm) | Input IP ₃ (dBm) | Control Voltage(V) | Die or QFN |
|---------------------|------------|----------------------|---------------------|----------------|----------------------|-----------------------|-------------------------------|-----------------------------|--------------------|----------------|
| SAC3204S | DC~4 | SPDT Non-Reflection | 0.8 | 70 | 20 | 20 | 29 | N/A | 0/+3~+5 | Bare die |
| SAC3208AQ3 | DC~12 | SPST Reflection | 0.9 | 60 | 18 | 18 | N/A | N/A | 0/+3.3~+5 | QFN3x3 |
| SAC3201AQ3 | DC~20 | SPDT Non-Reflection | 1.8 | 50 | 20 | N/A | 30 | 48 | 0/-5 | QFN3x3 |
| SAC3209AQ3 | DC~20 | SPST Reflection | 1 | 55 | 14 | N/A | N/A | N/A | 0/+3.3~+5 | QFN3x3 |
| SAC3229Q3 | DC~12 | SP3T Non-Reflection | 1.5 | 50 | -18 | -20 | 20 | N/A | 0/+5 | QFN3x3 |
| SAC3218A | 0.5~3 | SPDT Non-Reflection | 0.6 | 70 | 20 | 21 | N/A | N/A | 0/+5 | Bare die |
| SAC3204SQ3 | DC~4 | SPDT Non-Reflection | -0.8 | -70 | N/A | N/A | 29 | 49 | 0/+5 | QFN3x3 |
| SAC3204SQP3 | DC~4 | SPDT Non-Reflection | 0.9 | 70 | 20 | N/A | 30 | 45 | 0/+3.3~+5 | Plastic QFN3x3 |
| SAC3204M | DC~4 | SPDT Non-Reflection | 0.8 | 70 | 20 | 20 | 29 | N/A | 0/+3.3~+5 | Bare die |
| SAC3219A | 1~4 | SPDT Reflection | 0.7 | 47 | -15 | N/A | N/A | N/A | 0/+5 | Bare die |
| SAC3214A | DC~8 | SP3T Non-Reflection | 1.5 | 50 | 18 | N/A | 20 | N/A | 0/+5 | Bare die |
| SAC3215A | DC~8 | SP3T Non-Reflection | 1.5 | 50 | 18 | N/A | 20 | N/A | 0/+5 | Bare die |
| SAC3202A | DC~12 | SPDT Reflection | 1.2 | 48 | 20 | N/A | N/A | 42 | 0/+3.3~+5 | Bare die |
| SAC3202AQ3 | DC~12 | SPDT Reflection | 1.2 | 48 | -20 | N/A | 25 | 42 | 0/+3.3~+5 | QFN3x3 |
| SAC3203A | DC~12 | SPDT Reflection | 1.1 | 48 | 20 | N/A | 25 | 42 | 0/+3.3~+5 | Bare die |
| SAC3203AQ3 | DC~12 | SPDT Reflection | 1.2 | 48 | -20 | N/A | 25 | 42 | 0/+3.3~+5 | QFN3x3 |
| SAC3216 | DC~12 | SPDT Non-Reflection | 1.2 | 45 | 15 | N/A | 30 | 48 | 0/-5 | Bare die |
| SAC3201A | DC~20 | SPDT Non-Reflection | 1.8 | 50 | 15 | 20 | N/A | N/A | 0/-5 | Bare die |
| SAC3205AQP3 | DC~20 | SPDT Reflection | 1.5 | 40 | 1.3 | N/A | 20 | 35 | 0/+5 | Plastic QFN3x3 |
| SAC3206 | DC~20 | SPDT Non-Reflection | 2.3 | 45 | 15 | N/A | 30 | 48 | 0/+5 | Bare die |

| Model Number /Index | Freq (GHz) | Switch Configuration | Insertion Loss (dB) | Isolation (dB) | Return Loss (dB)(ON) | Return Loss (dB)(OFF) | Input P _{-1dB} (dBm) | Input IP ₃ (dBm) | Control Voltage(V) | Die or QFN |
|---------------------|------------|----------------------|---------------------|----------------|----------------------|-----------------------|-------------------------------|-----------------------------|--------------------|------------|
| SAC3206Q3 | DC~20 | SPDT Non-Reflection | 2.3 | 45 | 20 | N/A | 30 | 48 | 0/+5 | QFN3x3 |
| SAC3209A | DC~20 | SPST Reflection | 1 | 55 | 15 | N/A | N/A | N/A | 0/+3.3~+5 | Bare die |
| SAC3220 | DC~20 | SP4T Non-Reflection | 2.5 | 50 | 15 | N/A | N/A | N/A | 0/+3.3~+5 | Bare die |
| SAC3220Q3 | DC~20 | SP4T Non-Reflection | 2.5 | 50 | 16 | N/A | N/A | N/A | 0/+3.3~+5 | QFN3x3 |
| SAC3227 | 0.01~40 | SPDT Reflection | 2.3 | 30 @40GHz | 16 | N/A | 15 (P-0.2) | N/A | 0/+3.3~+5 | Bare die |

5 Phase Shifter

| Model Number/Index | Freq (GHz) | Resolution (bits) | Insertion Loss(dB) | Input VSWR (:1) | Output VSWR (:1) | Phase Accuracy (°) | RMS (°) | Control Voltage (V) | Die or QFN |
|--------------------|------------|-------------------|--------------------|-----------------|------------------|--------------------|---------|---------------------|------------|
| SAC3301B | 0.9~1.3 | 6 | 5.5 | 1.3 | 1.3 | 2 | 1.5 | 5 | Bare die |
| SAC3302Q6 | 1.2~1.6 | 6 | -5 | 1.3 | 1.3 | -2.2~3 | 1.4 | 0/-5 | QFN6x6 |
| SAC3301 | 0.9~1.3 | 6 | -5 | 1.3 | 1.3 | -0.5~2 | 1 | 0/+5 | Bare die |
| SAC3301A | 0.9~1.3 | 6 | -5.5 | 1.3 | 1.3 | ±2 | 1.5 | 0/+5 | Bare die |
| SAC3301Q6 | 0.9~1.3 | 6 | -5 | 1.2 | 1.2 | -3~3 | 2 | 0/+5 | QFN6x6 |
| SAC3310 | 1.2~1.4 | 6 | -4.8 | 1.3 | 1.4 | -1.5~1.5 | 1 | 0/+5 | Bare die |
| SAC3310Q6 | 1.2~1.4 | 6 | -4.8 | 1.2 | 1.2 | -1.5~1.5 | 1 | 0/+5 | QFN6x6 |
| SAC3302 | 1.2~1.6 | 6 | -5 | 1.3 | 1.3 | -2.2~3 | 1.4 | 0/-5 | Bare die |
| SAC3311 | 1.2~1.6 | 6 | -5 | 1.3 | 1.4 | -1.5~2.5 | 1.5 | 0/+5 | Bare die |
| SAC3315 | 1~2 | 6 | -8 | 1.2 | 1.2 | N/A | N/A | 0/-5 | Bare die |
| SAC3315Q6 | 1~2 | 6 | -8 | 2 | 2 | -5~5 | 2 | 0/+5 | QFN6x6 |
| SAC3303 | 2.2~2.6 | 6 | -4.5 | 1.3 | 1.3 | -1~1 | 0.8 | 0/+5 | Bare die |
| SAC3303Q5 | 2.2~2.6 | 6 | -4.8 | 1.3 | 1.3 | -1~1 | 1 | 0/+5 | QFN5x5 |
| SAC3312A | 2.0~3.2 | 6 | -8 | 1.4 | 1.4 | -3~5 | 2 | 0/+5 | Bare die |
| SAC3312AQ6 | 2.0~3.2 | 6 | -8 | 1.08 | 1.12 | -8~8 | 3.5 | 0/+5 | QFN6x6 |
| SAC3304 | 2.7~3.5 | 6 | -5.2 | 1.6 | 1.4 | -2~4.5 | 2 | 0/+5 | Bare die |
| SAC3304Q6 | 2.7~3.5 | 6 | -5.5 | 1.2 | 1.2 | -3~3 | 2 | 0/+5 | QFN6x6 |
| SAC3305 | 2.7~3.5 | 6 | -4.8 | 1.5 | 1.4 | -2~4 | 2 | 0/-5 | Bare die |
| SAC3305Q6 | 2.7~3.5 | 6 | -5.5 | 1.2 | 1.2 | -3~3 | 2 | 0/+5 | QFN6x6 |
| SAC3309 | 3.4~4.2 | 6 | -5.5 | 1.5 | 1.5 | -5~2.5 | 1 | 0/+5 | Bare die |
| SAC3309Q6 | 3.4~4.2 | 6 | -5.8 | 1.3 | 1.3 | -5~2.5 | 1 | 0/+5 | QFN6x6 |
| SAC3307B | 8~12 | 6 | -8 | 1.7 | 1.7 | -4~6 | 2.5 | 0/+5 | Bare die |
| SAC3307AQ6 | 8~12 | 6 | -8 | 1.2 | 1.3 | -4~4 | N/A | 0/-5 | QFN6x6 |
| SAC3316 | 6~18 | 6 | -14 | 1.5 | 1.5 | N/A | N/A | 0/-5 | Bare die |
| SAC3308 | 14~18 | 6 | -10 | 1.7 | 1.5 | -7~2 | 3 | 0/+5 | Bare die |
| SAC3308Q6 | 14~18 | 6 | -10 | 1.4 | 1.4 | -4~4 | 2.5 | 0/+5 | QFN6x6 |
| SAC3323 | 32~38 | 6 | -9 | 1.8 | 2 | N/A | N/A | 0/-5 | Bare die |

6 Attenuator

| Model Number/ Index | Freq (GHz) | Resolution (bits) | Insertion Loss (dB) | Input VSWR (:1) | Output VSWR (:1) | Attenuation Accuracy (dB) | RMS(dB) | Control Voltage (V) | Die or QFN |
|------------------------|---------------|----------------------|---------------------------|-----------------------|------------------------|---------------------------------|---------|---------------------------|------------|
| SAC3410 | 2~8 | | 1.5 | 1.2 | 1.3 | | | 0/+5 | Bare Die |
| SAC3402A | DC~6 | 6 | -2.5 | 1.4 | 1.4 | -0.3~1 | 0.8 | 0/+5 | Bare die |
| SAC3402AQ4 | DC~6 | 6 | -2.8 | 1.4 | 1.4 | -0.3~1 | 0.8 | 0/+3.3~5 | QFN4x4 |
| SAC3404 | DC~12 | 2 | -2.2 | 1.4 | 1.5 | -0.5~1.5 | 1 | 0/+5 | Bare die |
| SAC3406A | DC~12 | 6 | -1.5 | 1.3 | 1.2 | -0.6~1 | 0.5 | 0/+5 | Bare die |
| SAC3406ASPQ4 | DC~12 | 6 | -1.8 | 1.3 | 1.2 | -0.5~2 | 0.5 | 0/+5 | QFN4x4 |
| SAC3408BSPQ4 | DC~12 | 6 | -2.8 | 1.3 | 1.3 | -1~3.5 | 1 | 0/+5 | QFN4x4 |
| SAC3409 | DC~13 | 6 | -2 | 1.3 | 1.3 | N/A | N/A | 0/-5 | Bare die |
| SAC3403 | 8~12 | 6 | -3.8 | 1.3 | 1.3 | -0.5~1 | 0.5 | 0/+5 | Bare die |
| SAC3408B | DC~20 | 6 | 3.8 | -15 | -15 | ±2 | 0.8 | 0/+5 | Bare die |

7 Mixer

| Model Number /Index | Type | RF Freq (GHz) | LO Freq (GHz) | IF Freq (GHz) | Conversion Gain (dB) | LO-RF Isolation (dB) | LO-IF Isolation (dB) | RF-IF Isolation (dB) | LO Drive (dBm) | Output P ₁ dB (dBm) | Power Supply (V/mA) | Die or QFN |
|---------------------------|-----------------------------|---------------------|---------------------|------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------|--------------------------------------|---------------------------|---------------|
| SAC3507A | Double Balanced Mixer | 0.9~3 | 0.9~3 | DC~0.8 | -8 | -40 | -30 | N/A | 0 | 11 | 5/32 | Bare die |
| SAC3507AQ5 | Double Balanced Mixer | 0.9~3 | 0.9~3 | DC~0.8 | -8 | -40 | -20 | -18 | 0 | N/A | 5/32 | QFN5x5 |
| SAC3501 | Up Converter | 2~3.5 | 2~3.5 | DC~0.6 | +8 | -40 | N/A | N/A | 0 | 8 | 5/85 | Bare die |
| SAC3502 | Down Converter | 2~3.5 | 2~3.5 | 0.01~0.6 | +13 | -45 | N/A | N/A | 0 | 4.5 | 5/85 | Bare die |
| SAC3508 | Double Balanced Mixer | 2~6 | 2~6 | DC~2 | -8 | -25 | -20 | N/A | 0 | 7.5 | 5/42 | Bare die |
| SAC3508Q4 | Double Balanced Mixer | 2~6 | 2~6 | DC~2 | -8 | -24 | -24 | N/A | 0 | 11 | 5/42 | QFN4x4 |
| SAC3505 | Double Balanced Mixer | 3.5~9 | 3.5~9 | DC~1 | -9 | -35 | -21 | -21 | 13 | 7 | N/A | Bare die |
| SAC3515Q5 | Double Balanced Mixer | 3.5~9 | 3.5~9 | DC~3 | -8 | -30 | -30 | -30 | -4 | N/A | N/A | QFN5x5 |
| SAC3509 | Double Balanced Mixer | 5~10 | 5~10 | DC~4 | -8 | -38 | -35 | -15 | 13 | 9.8 | N/A | Bare die |
| SAC3511 | Double Balanced Mixer | 8~12 | 8~12 | DC~3 | +15 | -50 | -30 | -40 | 0 | N/A | N/A | Bare die |
| SAC3504 | Double Balanced Mixer | 7~14 | 7~14 | DC~3 | -8 | -35 | -27 | -18 | 13 | 6 | N/A | Bare die |
| SAC3510 | Double Balanced Mixer | 5~16 | 5~16 | DC~6 | -8.5 | -38 | -33 | -16 | 13 | 12 | N/A | Bare die |
| SAC3506 | Double Balanced Mixer | 11~20 | 11~20 | DC~4 | -8 | -30 | -27 | -18 | 13 | 10 | N/A | Bare die |
| SAC3514 | Sub-harm onic Mixer | 14~30 | 14~30 | DC~6 | -7 | -45 | -32 | -32 | 13 | N/A | N/A | Bare die |
| SAC3517 | Double Balanced Mixer | 14~32 | 4~20 | DC~7 | -12 | -30 | -32 | -30 | 15 | N/A | N/A | Bare die |
| SAC3513 | Double Balanced Mixer | 18~32 | 18~32 | DC~10 | -7.5 | -40 | -30 | -35 | 13 | N/A | N/A | Bare die |
| SAC3518 | Double Balanced Mixer | 18~36 | 9~16 | DC~7 | -13 | -30 | -15 | -35 | 0 | N/A | N/A | Bare die |

| Model Number /Index | Type | RF Freq (GHz) | LO Freq (GHz) | IF Freq (GHz) | Conversion Gain (dB) | LO-RF Isolation (dB) | LO-IF Isolation (dB) | RF-IF Isolation (dB) | LO Drive (dBm) | Output P ₁ dB (dBm) | Power Supply (V/mA) | Die or QFN |
|---------------------|-----------------------|---------------|---------------|---------------|----------------------|----------------------|----------------------|----------------------|----------------|--------------------------------|---------------------|------------|
| SAC3516 | Double Balanced Mixer | 24~34 | 12~18 | DC~4 | -9 | -35 | -30 | -25 | 4 | 16 | N/A | Bare die |
| SAC3512 | Double Balanced Mixer | 24~40 | 24~40 | DC~10 | -8.5 | -40 | -30 | -30 | 13 | N/A | N/A | Bare die |

8 Power Divider

| Model Number/ Index | Freq (GHz) | Description | Insertion Loss(dB) | Amplitude Unbalance (dB) | Input VSWR (:1) | Output VSWR (:1) | Isolation (dB) | Die or QFN |
|---------------------|------------|----------------------|--------------------|--------------------------|-----------------|----------------------------|----------------|------------|
| SAC3809Q4 | 1~18 | 0° Two-Way Divider | -1 | ±0.2 | 1.4 | 1.4 | -20 | QFN4x4 |
| SAC3808 | 2~6 | 0° Two-Way Divider | -0.7 | ±0.07 | 1.4 | 1.3 | -13 | Bare die |
| SAC3809 | 1~18 | 0° Two-Way Divider | -1 | ±0.2 | 1.4 | 1.4 | -20 | Bare die |
| SAC3807 | 8~12 | 0° Two-Way Divider | -0.9 | ±0.05 | 1.3 | 1.3 | -23 | Bare die |
| SAC3811Q5 | 8~12 | 0° Four-Way Divider | -1.8 | ±0.1 | (RFCVSWR) 1.3 | (RF1/RF2/RF3/R F4VSWR)1.25 | -35 | QFN5x5 |
| SAC3801A | 2~20 | 0° Two-Way Divider | -1 | ±1 | 1.3 | 1.3 | -20 | Bare die |
| SAC3801AQ4 | 2~20 | 0° Two-Way Divider | -1 | ±0.25 | 1.4 | 1.4 | -20 | QFN4x4 |
| SAC3802A | 6~18 | 0° Three-Way Divider | -0.7 | ±0.2 | 1.3 | 1.2 | -25 | Bare die |
| SAC3803A | 6~18 | 0° Three-Way Divider | -1 | ±0.2 | 1.3 | 1.2 | -25 | Bare die |
| SAC3803AQ4 | 6~18 | 0° Three-Way Divider | -1 | 0.4 | 1.5 | 1.5 | -28 | QFN4x4 |
| SAC3805 | 18~26 | 0° Two-Way Divider | -0.9 | N/A | 1.8 | 1.2 | -19 | Bare die |

9 Multifunction Chip

| Model Number/ Index | Freq (GHz) | Description | Gain (dB) | RMS of Phase Accuracy (°) | RMS of Attenuation Accuracy (dB) | Control Voltage (V) | Die Size (mm) | Die or QFN |
|---------------------|------------|---|-----------|---------------------------|----------------------------------|---------------------|---------------|------------|
| SAC3602 | 1.98~2.3 | Integrated 12-bit Model to parallel chip, amplifier, 6-bit phase shifter, 6-bitattenuator | 16.5 | 1.5 | 0.5 | 0/+5 | 3.2×3.2×0.1 | Bare die |
| SAC3601 | 2.7~3.1 | Integrated 4-bit phase shifter and 2-bit attenuator | -3.5 | 0.8 | 0.08 | 0/+5 | 3.1×1.25×0.1 | Bare die |
| SAC3603 | 5~6 | Integrated switch, amplifier, 6-bit phase shifter, 6-bit attenuator | 10.5 | 2.5 | 0.3 | 0/+5 | 5.0×3.5×0.1 | Bare die |
| SAC3613 | 8~12 | X-band Integrated phase shifter, attenuator | 1.5 | 2.5 | 1 | 0/+5 | 5.0×3.5×0.1 | Bare die |

| Model Number/ Index | Conversion Gain (dB) | Description | Gain (dB) | RMS of Phase Accuracy (°) | RMS of Attenuation Accuracy(dB) | Control Voltage (V) | Die Size (mm) | Die or QFN |
|---------------------|----------------------|---|-----------|---------------------------|---------------------------------|---------------------|---------------|------------|
| SAC3604 | 6 | Integrated with RF bidirectional amplifier, LO driver amplifier, dual balanced mixer and switch | 0.7~2.0 | 0.7~2.0 | DC~1 | 0 | | Bare die |
| SAC3605 | 16 | Integrated with RF bidirectional amplifiers, a LO drive amplifier, a double balanced mixer, switches, a low pass filter, and 3-bit digital controlled attenuators | 2.5~5.0 | 2.5~5.0 | 0.65~1.5 | 0 | | Bare die |
| SAC3606 | -8.5 | Integrated switch, mixer and | 8.0~12 | 10.8~14.8 | 2.8 | -3 | | Bare die |

| Model Number/ Index | Conversion Gain (dB) | Description | Gain (dB) | RMS of Phase Accuracy (°) | RMS of Attenuation Accuracy(dB) | Control Voltage (V) | Die Size (mm) | Die or QFN |
|---------------------|----------------------|--|-----------|---------------------------|---------------------------------|---------------------|---------------|------------|
| | | low-pass filter | | | | | | |
| SAC3606Q4 | -9 | Integrated switch, mixer and low-pass filter | 8.0~12 | 10.8~14.8 | 2.8 | -3 | | QFN4x4 |
| SAC3607 | 5 | Integrated switch, mixer, low pass filter, amplifier | 8.0~12 | 10.8~14.8 | 2.8 | 3 | | Bare die |
| SAC3607Q5 | 4.5 | Integrated switch, mixer, low pass filter, amplifier | 8.0~12 | 10.8~14.8 | 2.8 | 3 | | QFN5x5 |

| Model Number/Index | Freq (GHz) | Description | Gain (dB) | Output P ₁ dB (dBm) | Control level (V) | Working Current (mA) | Die Size (mm) | Die or QFN |
|--------------------|------------|---|-----------|--------------------------------|-------------------|----------------------|---------------|------------|
| SAC3608 | 2.0~4.0 | Realization of switch transceiver and amplifier | 25.5 | 16 | 5 | 80 | 2.5x2.1x0.1 | Bare die |
| SAC3609 | 0.7~5.0 | Realization of switch transceiver and amplifier | 21.0 | 16 | 5 | 120 | 2.5x2.1x0.1 | Bare die |

10 Amplitude Equalizer

| Model Number/ Index | Freq(GHz) | Insertion Loss (dB) | Slope(dB) | Input VSWR (:1) (Typ.) | Output VSWR (:1) (Typ.) | Die or QFN |
|---------------------|-----------|---------------------|-----------|------------------------|-------------------------|------------|
| SAC3704 | 0.5~6 | -0.4@6GHz | 2 | 1.2 | 1.2 | Bare die |
| SAC3702 | 1~20 | -2.5@20GHz | 4 | 1.2 | 1.2 | Bare die |
| SAC3702Q3 | 1~20 | -1.5@20GHz | 4 | 1.4 | 1.4 | QFN3x3 |
| SAC3703 | 1~20 | -2.8@20GHz | 8 | 1.2 | 1.2 | Bare die |
| SAC3703Q3 | 1~20 | -2@20GHz | 9 | 1.4 | 1.4 | QFN3x3 |

11 Power Detector

| Model Number /Index | Freq (GHz) | Flatness (dB) | Input VSWR (:1) | Dynamic Range (dB) | Rise Time (ns) | Fall Time (ns) | I _b (mA) | Die or QFN |
|---------------------|------------|---------------|-----------------|--------------------|----------------|----------------|---------------------|----------------|
| SAC1001 | DC~20 | 1 | 1.6 | 30 | 50 | 300 | 2.5 | Bare die |
| SAC1001Q3E2 | 0.5~20 | 1 | 2 | 30 | 100 | 300 | 2.5 | QFN3x3 |
| SAC1003QP3 | 0.5~20 | 2 | 2 | 40 | 100 | 300 | 2.5 | Plastic QFN3x3 |
| SAC1003A | 0.5~27 | 1 | 2 | 40 | 100 | 300 | 2.5 | Bare die |
| SAC1002 | 1~40 | 1 | 2 | 30 | 50 | 300 | 2.0 | Bare die |
| SAC1002Q3 | 1~40 | 2 | 2 | 30 | 50 | 300 | 2 | QFN3x3 |
| SAC1004 | 2~67 | 3 | 1.6 | 30 | 25 | 75 | 2 | Bare die |

12 Transistor

| Model Number /Index | Freq (GHz) | Gain (dB) | Noise Figure (dB) | Output P ₁ dB(dBm) | Output IP ₃ (dBm) | Die or QFN |
|---------------------|------------|-----------|-------------------|-------------------------------|------------------------------|------------|
| SAC2501 | 0.1~8 | 28 | 0.5 | 24 | 33 | Bare die |
| SAC2502 | 0.1~8 | 21 | 0.8 | 17 | 33 | Bare die |
| SAC2503 | 0.1~40 | 10 | 1.5 | 13 | 22 | Bare die |
| SAC2504 | 0.1~40 | 12 | 1.8 | 13 | 22 | Bare die |

13 Spiral Inductor

| Model Number/ Index | Turns | (nH)(typ.) | Rs@DC (Ohm) | Rs@GHz (Ohm) | Q@GHz | Resonant Freq (GHz) | Chip Size (mm X mm) |
|---------------------|-------|------------|-------------|--------------|----------|---------------------|---------------------|
| SAC6005A | 3.5 | 5 | 1 | 3.7@4.0 | 26.5@4.0 | 16.5 | 0.75x0.75x0.2 |
| SAC6007P5A | 4.5 | 7.5 | 1.3 | 6.0@4.0 | 27.0@4.0 | 12.8 | 0.80x0.80x0.2 |
| SAC6010A | 5.5 | 10 | 1.6 | 8.0@4.0 | 26.0@4.0 | 11.3 | 0.80x0.80x0.2 |
| SAC6015A | 6.5 | 15 | 2.1 | 5.6@4.0 | 26.5@4.0 | 8.5 | 0.80x0.80x0.2 |
| SAC6020A | 7.5 | 20 | 2.6 | 7.5@2.0 | 28.5@2.0 | 7.0 | 0.80x0.80x0.2 |
| SAC6050A | 9.5 | 50 | 5.1 | 10.6@1.0 | 28.5@1.5 | 2.8 | 0.95x0.95x0.2 |
| SAC6090A | 12.5 | 90 | 8 | 26.3@1.0 | 26.5@1.0 | 1.8 | 1.10x1.10x0.2 |
| SAC6200A | 17.5 | 200 | 14 | 30.0@1.0 | 23.0@1.0 | 1.0 | 1.37x1.37x0.2 |

14 Module

| Model Number/ Index | Type | Freq | Gain | Gain Flatness (dB) | Noise Figure | Input Return Loss | Output Return Loss | Output P-1dB (dBm) | Reverse Isolation | Power Supply (V/A) | Size (mm) |
|---------------------|------|------------|------|--------------------|--------------|-------------------|--------------------|--------------------|-------------------|--------------------|--------------|
| SAC1103 | DA | 26~40 | 11 | ±1.5 | N/A | N/A | N/A | 15 | N/A | 6/0.1 | N/A |
| SAC1104 | DA | 28~32 | 25 | ±1.5 | N/A | N/A | N/A | 28 | N/A | 6/0.8 | N/A |
| SAC1105 | DA | 33~38 | 25 | ±1.5 | N/A | N/A | N/A | 26 | N/A | 6/0.8 | N/A |
| SAC1121 | PA | 27.5~31 | 25 | ±1.5 | N/A | -16 | -16 | 40 | N/A | 6/13 | N/A |
| SAC1123 | PA | 34~36 | 24 | N/A | N/A | 1.6 | 1.6 | 40 | N/A | 6.3/11 | N/A |
| SAC1125 | PA | 9~11 | 23 | N/A | 5.5 | -14 | -12 | N/A | N/A | 13.5/55 | N/A |
| SAC1127 | PA | 13.5~14.75 | 23 | N/A | N/A | -14 | -14 | 47.5 | N/A | 8.5/25 | N/A |
| SAC1128 | DA | 26~40 | 25 | N/A | 5.5 | N/A | N/A | 23 | N/A | 8/0.35 | N/A |
| SAC1129 | PA | 28~30 | 30 | N/A | N/A | -10 | -5 | 32.5 | N/A | 6/14 | N/A |
| SAC1130 | LNA | 0.03~0.45 | 30 | N/A | 0.6 | -10 | -15 | 40.5 | -45 | 8/0.1 | 54x30x8 |
| SAC1131 | LNA | 0.35~0.7 | 36 | N/A | 0.6 | -15 | -13 | 18 | N/A | 7/0.1 | N/A |
| SAC1132 | LNA | 0.7~1.4 | 33 | N/A | 0.7 | -14 | -13 | 20 | -42 | 7~15/0.1~0.15 | N/A |
| SAC1133 | LNA | 1.7~2.7 | 32 | N/A | 0.9 | -14 | -13 | 8 | -45 | 7/0.07 | N/A |
| SAC1134 | LNA | 2~8 | 32 | N/A | 1.0 | -14 | -13 | 12 | -55 | 7/0.12 | N/A |
| SAC1135 | LNA | 1.2~3.4 | 34 | N/A | 0.9 | -14 | -13 | 17 | -55 | 7~15/0.11 | 54x30x8 |
| SAC1136 | LNA | 0.9~2 | 15 | N/A | 0.7 | N/A | N/A | 15 | -28 | 7~15/0.04 | 54x30x8 |
| SAC1137 | LNA | 2.4~2.5 | 27.5 | N/A | 2.7 | -14 | -14 | 11 | -53 | 5/0.07 | N/A |
| SAC1139 | SPDT | 5.1~5.3 | N/A | N/A | N/A | N/A | N/A | N/A | -50 | 5/0.1 | 34x22x10 |
| SAC1140 | LNA | 0.01~2 | 23 | N/A | 0.8 | N/A | N/A | 20 | -45 | 5/0.1 | 54x30x8 |
| SAC1141 | PA | 9~11 | 23 | N/A | 5.5 | 1.5 | 1.7 | N/A | N/A | 13.5~15/5.5 | N/A |
| SAC1145 | PA | 0.7~1.3 | 31 | ±1.5 | N/A | -14 | -15 | 36 | N/A | 8/1.2 | 25.4x34x5.5 |
| SAC1148 | PA | 5.4~5.8 | 20 | ±1.5 | N/A | N/A | N/A | 36 | N/A | 8~28/2 | 52.9x32x10 |
| SAC1149 | LNA | 2~4 | 30 | ±1.0 | 0.6 | -14 | -13 | 10 | N/A | 5/0.04 | 17.8x20x8.35 |
| SAC1150 | PA | 9~11 | 22.5 | N/A | 10.5 | -14 | -14 | N/A | N/A | 15/8.5 | N/A |
| SAC1151 | DA | 0.1~20 | 28 | ±1.0 | 3.5 | N/A | N/A | 10 | N/A | 9/0.13 | 40x20x9 |
| SAC1154 | DA | 0.1~20 | 46 | ±1.5 | 3.5 | N/A | N/A | 10 | N/A | 9~15/0.23 | 40x20x9 |

| Model Number/ Index | Type | Freq | Gain | Gain Flatness (dB) | Noise Figure | Input Return Loss | Output Return Loss | Output P-1dB (dBm) | Reverse Isolation | Power Supply (V/A) | Size (mm) |
|---------------------|------|-------------|------|--------------------|--------------|-------------------|--------------------|--------------------|-------------------|--------------------|----------------|
| SAC1155 | PA | 0.7~1.5 | 32 | ±1.0 | N/A | -14 | -15 | N/A | N/A | 28/0.8 | N/A |
| SAC1156 | LNA | 2~8.5 | 27 | ±1.5 | 1.0 | N/A | N/A | 10 | N/A | 5/0.04 | 17.8×20×8.35 |
| SAC1157 | LNA | 2~4 | 28 | ±1.0 | 0.6 | N/A | N/A | 10 | N/A | 5/0.03 | 17.8×20×8.35 |
| SAC1157-R | LNA | 2~4 | 28 | ±1.0 | 0.6 | N/A | N/A | 10 | N/A | 7-15/0.03 | 17.8×20×8.35 |
| SAC1158 | LNA | 0.8~1.6 | 32 | ±1.0 | 0.5 | N/A | N/A | 13 | N/A | 5/0.05 | 17.8×20×8.35 |
| SAC1159-R | LNA | 2~4 | 55 | ±1.0 | 45°K | N/A | N/A | 10 | N/A | 7-15/0.07 | 17.8×20×8.35 |
| SAC1160 | LNA | 1~12 | 16 | ±1.0 | 1.5 | N/A | N/A | 13 | N/A | 5/0.06 | 17.8×20×8.35 |
| SAC1160-R | LNA | 1~12 | 16 | ±1.0 | 1.5 | N/A | N/A | 13 | N/A | 7-15/0.06 | 17.8×20×8.35 |
| SAC1161 | LNA | 0.4~6 | 17 | ±1.0 | 1.2 | N/A | N/A | 17 | N/A | 5/0.06 | 17.8×20×8.35 |
| SAC1163-R | LNA | 0.8~1.6 | 60 | ±1.0 | 40°K | N/A | N/A | 12 | N/A | 7-15/0.1 | 17.8×20×8.35 |
| SAC1166 | PA | 5.4~5.8 | 36 | ±1.5 | N/A | -14 | -11 | 36 | N/A | 8/1.5 | N/A |
| SAC1167 | PA | 13.75~14.5 | 26 | ±2.0 | N/A | -11 | -10 | 35.5 | N/A | 7/1.3 | N/A |
| SAC1168 | LNA | 0.0007~0.5 | 37 | ±0.5 | 1.2 | N/A | N/A | 7 | N/A | 15/0.045 | 48.8×26.9×15.4 |
| SAC1173 | PA | 22~26 | 29 | N/A | 7.5 | -14 | -7.5 | 32 | N/A | 28/2 | N/A |
| SAC1174 | PA | 22~26 | 28 | N/A | 8 | -14 | -14 | 35 | N/A | 28/2 | N/A |
| SAC1176 | LNA | 6~18 | 38 | ±1.0 | 2 | N/A | N/A | 14 | N/A | 12/0.11 | 17.8×20×8.35 |
| SAC1179 | PA | 27.5~30 | 23 | ±1.0 | 6 | 1.5 | 2 | 34.5 | N/A | 5~6.5/3 | N/A |
| SAC1189K | LNA | 7.9~8.4 | 42 | ±0.2 | 1.4 | N/A | N/A | 18 | N/A | 12/0.19 | 155.5×47.8×36 |
| SAC1191 | PA | 0.5~4 | 25 | N/A | N/A | 1.4 | 1.4 | 31.5 | N/A | 15/0.7 | N/A |
| SAC1192 | LNA | 0.5~4 | 35 | N/A | 0.9 | N/A | N/A | 12 | N/A | 8~15/0.2 | N/A |
| SAC1197 | LNA | 26.5~40 | 38 | N/A | 3.3 | N/A | N/A | 13 | N/A | 12~15/0.15 | 45×22.4×22.4 |
| SAC1198 | LNA | 18~26 | 38 | ±1.0 | 3.1 | N/A | N/A | 13 | N/A | 12~15/0.11 | 45×22.4×22.4 |
| SAC1202 | PA | 1.1~1.6 | 39 | ±1.5 | N/A | 1.5 | 1.8 | 38 | N/A | 22~26/0.71 | 52.9×32×10 |
| SAC1203 | PA | 2.4~2.5 | 21 | ±1.5 | N/A | 1.5 | 1.8 | 40 | N/A | 22~26/0.8 | 52.9×32×10 |
| SAC1210 | LNA | 5~6 | 35 | N/A | 1 | N/A | N/A | 10 | N/A | 8~15/0.15 | 52.9×32×10 |
| SAC1215A | LNA | 8~10 | 47 | N/A | 2.3 | N/A | N/A | 15 | N/A | 8~15/0.25 | N/A |
| SAC1216A | LNA | 9~10 | 13 | N/A | 2 | N/A | N/A | 11 | N/A | 8~15/0.2 | N/A |
| SAC1217 | LNA | 9.5~10.5 | 45 | N/A | 1.5 | N/A | N/A | 15 | N/A | 8~15/0.2 | N/A |
| SAC1224 | LNA | 0.02~6 | 25 | N/A | 1 | N/A | N/A | 17 | N/A | 8~15/0.15 | N/A |
| SAC1226 | LNA | 4.61~5.01 | 35 | N/A | 1 | N/A | N/A | 14 | N/A | 8~15/0.12 | N/A |
| SAC1227 | LNA | 2.2~2.5 | 47 | N/A | 0.45 | N/A | N/A | 20 | N/A | 12~24/0.25 | N/A |
| SAC1230 | PA | 2~6 | 40 | N/A | N/A | 2.0 | 2.5 | 37 | N/A | 12~15/0.27 | N/A |
| SAC1231 | LNA | 2~18 | 35 | N/A | 2.5 | N/A | N/A | 10 | N/A | 12~15/0.15 | N/A |
| SAC1232 | LNA | 18~26 | 25 | N/A | 2.5 | N/A | N/A | 10 | N/A | 12~15/0.18 | N/A |
| SAC1233 | LNA | 26~40 | 35 | N/A | N/A | N/A | N/A | 10 | N/A | 12~15/0.15 | 48.8×26.9×15.4 |
| SAC1234 | LNA | 4~18 | 35 | N/A | 2.5 | N/A | N/A | 10 | N/A | 12~15/0.15 | N/A |
| SAC1235 | LNA | 37.5~40.5 | 40 | ±1.0 | 2.7 | N/A | N/A | 11 | N/A | 12~15/0.15 | N/A |
| SAC1236 | LNA | 1.315~1.515 | 35 | N/A | 0.4 | N/A | N/A | 14 | N/A | 8~15/0.15 | N/A |
| SAC1237 | PA | 1.1~1.6 | 39 | ±1.5 | N/A | 1.5 | 1.8 | 38 | N/A | 22~26/0.71 | N/A |
| SAC1238 | LNA | 4.4~5 | 46 | N/A | 0.7 | N/A | N/A | 18 | N/A | 8~20/0.18 | N/A |
| SAC1239 | PA | 2.4~2.5 | 21 | ±1.5 | N/A | 1.5 | 1.8 | 40 | N/A | 22~26/0.8 | N/A |

| Model Number/ Index | Type | Freq | Gain | Gain Flatness (dB) | Noise Figure | Input Return Loss | Output Return Loss | Output P-1dB (dBm) | Reverse Isolation | Power Supply (V/A) | Size (mm) |
|---------------------|-------|-----------|------|--------------------|--------------|-------------------|--------------------|--------------------|-------------------|--------------------|----------------|
| SAC1241 | LNA | 0.1~6 | 16 | N/A | 2.5 | N/A | N/A | 15 | N/A | 12/0.3 | N/A |
| SAC1242 | LNA | 0.1~6 | 21 | N/A | 1 | N/A | N/A | 15 | N/A | 8~12/0.1 | N/A |
| SAC1244 | LNA | 0.5~20 | N/A | 1.0 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SAC1247 | LNA | 6~18 | 30 | N/A | N/A | N/A | N/A | 18 | N/A | 15/0.4 | N/A |
| SAC1248 | LNA | 0.4~6 | 30 | N/A | N/A | N/A | N/A | 20 | N/A | 15/0.25 | N/A |
| SAC1249 | DA | 0.9~8 | 25 | ±1.5 | 2 | N/A | N/A | 29 | N/A | 12~28/1 | N/A |
| SAC1251 | PA | 1~2 | 40 | N/A | N/A | 1.5 | 1.5 | N/A | N/A | N/A | N/A |
| SAC1252A | LNA | 5.4~5.9 | 28 | ±0.1 | 0.8 | N/A | N/A | 15 | N/A | 8/0.063 | 17.8×20×10.0 |
| SAC1253 | LNA | 0.45~0.55 | 46 | N/A | 0.8 | N/A | N/A | N/A | N/A | 12/0.21 | 25.4×34×5.5 |
| SAC1254 | LNA | 12~18 | 20 | 1.5 | N/A | N/A | N/A | N/A | N/A | 5/0.065 | N/A |
| SAC1256 | PA | 14.5~15.5 | 20 | ±1.0 | N/A | 1.5 | 2.0 | 38 | N/A | 8/4 | N/A |
| SAC1258 | LNA | 0.05~1.5 | 36 | ±1.0 | 1 | N/A | N/A | 16 | N/A | 5/0.18 | N/A |
| SAC1259 | DA | 0.05~1.5 | N/A | ±1.5 | 4 | N/A | N/A | 30 | N/A | 18~28/0.3 | N/A |
| SAC1260 | PA | 2.7~3.3 | 30 | ±1.5 | N/A | 1.7 | 2 | N/A | N/A | 12~15/1.5 | N/A |
| SAC1261 | LNA | 10~18 | 35 | N/A | 2 | N/A | N/A | 25 | N/A | 12~15/0.4 | N/A |
| SAC1262 | LNA | 24~30 | 35 | N/A | 2 | N/A | N/A | 25 | N/A | 12~15/0.4 | N/A |
| SAC1263 | SP3T | 6~18 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | +5V/-5V/0.085 | N/A |
| SAC1264 | LNA | 0.5~4 | 47 | ±1.5 | 1 | N/A | N/A | 27 | N/A | 12/0.3 | N/A |
| SAC1266 | PA | 1~2.5 | 36 | ±1.5 | N/A | 1.7 | 1.7 | 33 | N/A | 14~16/0.6 | N/A |
| SAC1270 | LNA | 5~7 | 35 | ±1.0 | 1 | N/A | N/A | 10 | N/A | 8~15/0.15 | N/A |
| SAC1271 | SP2T | 2~18 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SAC1272 | SP2T | 2~18 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SAC1273 | SPST | 1~6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SAC1274 | SP16T | 1~6 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SAC1276 | PA | 9~12.5 | N/A | ±1.5 | N/A | 1.7 | 2.2 | 33 | N/A | 12~15/2 | N/A |
| SAC1277 | LNA | 4.4~5 | 50 | ±1.5 | 0.6 | N/A | N/A | 11 | N/A | 12~15 /0.12 | N/A |
| SAC1278 | LNA | 18~40 | 35 | ±2.0 | 4 | N/A | N/A | 10 | N/A | 12~15 /0.21 | N/A |
| SAC1281 | LNA | 2~18 | 15 | N/A | N/A | N/A | N/A | 10 | N/A | 12~15 /0.06 | N/A |
| SAC1282 | LNA | 2~18 | 30 | N/A | 2 | N/A | N/A | 10 | N/A | 14~17/0.17 | N/A |
| SAC1283 | LNA | 2~18 | 25 | ±2.0 | 6.5 | N/A | N/A | 27 | N/A | 14~17 /0.45 | N/A |
| SAC1284 | LNA | 0.7~2.7 | 30 | ±1.0 | 2.5 | N/A | N/A | 25 | N/A | 12/0.2 | N/A |
| SAC1285 | LNA | 0.7~2.7 | 35 | ±1.0 | N/A | N/A | N/A | 15 | N/A | 12/0.12 | N/A |
| SAC1288 | LNA | 1~6 | 35 | ±1.0 | 1.5 | N/A | N/A | 24 | N/A | 8/0.2 | N/A |
| SAC1290 | LNA | 0.02~2 | 30 | ±2.0 | 2 | N/A | N/A | 15 | N/A | 8~15/0.18 | N/A |
| SAC1291 | LNA | 8.9~9.5 | 22 | ±0.75 | 1 | N/A | N/A | 12 | N/A | 8~12/0.1 | N/A |
| SAC1293 | PA | 2~4 | 36 | ±1.5 | N/A | N/A | N/A | 30 | N/A | 18~32/1 | 52.9×32.0×10.0 |
| SAC1294 | LNA | 0.4~0.9 | 30 | N/A | 1 | N/A | N/A | 16 | N/A | 8~15/0.12 | N/A |
| SAC1295 | PA | 14~16 | 37 | ±1.5 | N/A | N/A | N/A | 33 | N/A | 18~32/1 | 52.9×32.0×10.0 |
| SAC1296 | DA | 13.2~16 | 15 | ±1.0 | 1.5 | N/A | N/A | 22 | N/A | 15/0.2 | N/A |
| SAC1297 | LNA | 0.5~10 | 45 | ±2.0 | 4 | N/A | N/A | 24 | N/A | 14~17 /0.45 | N/A |
| SAC1299 | LNA | 2~6 | 32 | ±1.0 | 1.2 | N/A | N/A | 20 | N/A | 10~15 /0.15 | N/A |

| Model Number/ Index | Type | Freq | Gain | Gain Flatness (dB) | Noise Figure | Input Return Loss | Output Return Loss | Output P-1dB (dBm) | Reverse Isolation | Power Supply (V/A) | Size (mm) |
|---------------------|------|-----------------|------|--------------------|--------------|-------------------|--------------------|--------------------|-------------------|----------------------------------|-----------|
| SAC1300 | LNA | 8~8.5 | 52 | N/A | 1 | N/A | N/A | 5 | N/A | 12/0.6 | N/A |
| SAC1301 | LNA | 1.558~1.592 | 55 | ±0.5 | 1.5 | N/A | N/A | 15 | N/A | 12~15 /0.11 | N/A |
| SAC1305 | DA | 2~4 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SAC1306 | DA | 2~4 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SAC1308 | LNA | 0.01~0.6 | 31.5 | ±1.0 | 0.5 | N/A | N/A | 19 | N/A | 12~15 /0.13 | N/A |
| SAC1309 | LNA | 22~31 | 35 | ±2.0 | 2.5 | N/A | N/A | 10 | N/A | 12~15 /0.13 | N/A |
| SAC1310 | DA | 2~40 | 30 | ±0.75 | 6 | N/A | N/A | 10 | N/A | 9~12/0.4 | N/A |
| SAC1311 | LNA | 0.8~3 | 36 | ±1.0 | 1 | N/A | N/A | 10 | N/A | 7~15/0.2 | N/A |
| SAC1312 | LNA | 0.05~10 | 21 | ±1.5 | 1.5 | N/A | N/A | 10 | N/A | 8~12/0.15 | N/A |
| SAC1313 | LNA | 8~12 | 45 | N/A | 1 | N/A | N/A | 10 | N/A | 8~15/0.1 | N/A |
| SAC1314 | DA | 18~40 | 30 | ±1.5 | 7.5 | N/A | N/A | 26 | N/A | 8/0.65 | N/A |
| SAC1315 | SPST | 6~12 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | +5V/-5V/0.08 | N/A |
| SAC1316 | SP2T | 6~12 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | +5V/-5V/0.08 | N/A |
| SAC1318 | LNA | 0.9~1.2 | 33.5 | ±0.5 | 0.5 | N/A | N/A | 10 | N/A | 8~15/0.08 | N/A |
| SAC1321 | LNA | 1.56542~1.58542 | 48 | ±1.0 | 1.5 | N/A | N/A | 15 | N/A | 8~12/0.15 | N/A |
| SAC1322 | PA | 4~6 | 37 | ±1.5 | N/A | N/A | N/A | 35 | N/A | 12~15/2.5 | N/A |
| SAC1323 | LNA | 0.05~0.15 | 30 | N/A | 0.5 | N/A | N/A | 22 | N/A | 12~15 /0.17 | N/A |
| SAC1324 | LNA | 0.5~5 | 63 | ±1.75 | 2.5 | N/A | N/A | 16 | N/A | 12~15 /0.27 | N/A |
| SAC1326 | LNA | 6~18 | 50 | ±3.0 | 2 | N/A | N/A | 19 | N/A | 12~15 /0.95 | N/A |
| SAC1327 | LNA | 0.0001~1 | 60 | ±1.5 | 2 | N/A | N/A | 14 | N/A | 12~15 /0.23 | N/A |
| SAC1328 | LNA | 1.69~1.71 | 48 | ±1.0 | 0.6 | N/A | N/A | 14 | N/A | 24/0.17 | N/A |
| SAC1329 | LNA | 10~20 | 30 | ±2.0 | 3.5 | N/A | N/A | 20 | N/A | 10~15 /0.26 | N/A |
| SAC1330 | LNA | 6~18 | 42 | ±3.0 | 2 | N/A | N/A | 29 | N/A | 12~15 /0.95 | N/A |
| SAC1331 | LNA | 1~10 | 15 | ±2.0 | 1.5 | N/A | N/A | 25 | N/A | 14~17 /0.35 | N/A |
| SAC1332 | LNA | 8~12 | 35 | ±1.5 | N/A | N/A | N/A | 31 | N/A | 12~18/1 | N/A |
| SAC1333 | LNA | 8~14 | 25 | ±1.5 | 6 | N/A | N/A | 21 | N/A | 8~18/0.25 | N/A |
| SAC1334 | LNA | 8~13 | 35 | ±1.5 | 2.5 | N/A | N/A | 14 | N/A | 8~18/0.14 | N/A |
| SAC1335 | LNA | 6~18 | 38 | ±2.0 | 2 | N/A | N/A | 22 | N/A | 8~16/0.4 | N/A |
| SAC1336 | LNA | 2~4 | 26 | ±1.5 | 1.8 | N/A | N/A | 5 | N/A | 12~16/0.1 | N/A |
| SAC1337 | LNA | 1.1~1.8 | 36 | ±1.0 | 0.7 | N/A | N/A | 10 | N/A | 12~16/0.1 | N/A |
| SAC1338 | PA | 8.5~9.5 | 15 | ±1.5 | N/A | 2.0 | N/A | 41.5 | N/A | -VSS:-5V(0.1A) +VDD:+8.5V(8A) | N/A |
| SAC1339 | LNA | 0.1~3 | 30 | ±1.0 | 1.2 | N/A | N/A | 18 | N/A | 8~15/0.12 | N/A |
| SAC1340 | LNA | 6~20 | 20 | ±2.0 | 3 | N/A | N/A | 28 | N/A | 14~17/0.45 | N/A |