



No.572D

2SA1016,1016K/2SC2362,2362K

PNP/NPN Epitaxial Planar Silicon Transistors

High-Voltage Low-Noise Amp Applications

zakazplat.ru

() : 2SA1016,1016K

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

| | 2SA1016,2SC2362 | 2SA1016K,2SC2362K | unit |
|------------------------------|-------------------|-------------------|------------------|
| Collector to Base Voltage | V_{CB0} (-) 120 | (-) 150 | V |
| Collector to Emitter Voltage | V_{CE0} (-) 100 | (-) 120 | V |
| Emitter to Base Voltage | V_{EBO} | (-) 5 | V |
| Collector Current | I_C | (-) 50 | mA |
| Collector Current(Pulse) | I_{CP} | (-) 100 | mA |
| Collector Dissipation | P_C | 400 | mW |
| Junction Temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

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

| | | | min | typ | max | unit |
|--------------------------|----------------|--|---------|--------------|---------|---------------|
| Collector Cutoff Current | I_{CBO} | $V_{CB}=(-) 80\text{V}, I_E=0$ | | | (-) 1.0 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB}=(-) 4\text{V}, I_C=0$ | | | (-) 1.0 | μA |
| DC Current Gain | h_{FE} | $V_{CE}=(-) 6\text{V}, I_C=(-) 1\text{mA}$ | 160* | | 960* | |
| Gain-Bandwidth Product | f_T | $V_{CE}=(-) 6\text{V}, I_C=(-) 1\text{mA}$ | | (110) 130 | | MHz |
| Output Capacitance | C_{ob} | $V_{CB}=(-) 10\text{V}, f=1\text{MHz}$ | | (2.2) 1.8 | | pF |
| C-E Saturation Voltage | $V_{CE(sat)}$ | $I_C=(-) 10\text{mA}, I_B=(-) 1\text{mA}$ | | | (-) 0.5 | V |
| C-B Breakdown Voltage | $V_{(BR)CBO}$ | $I_C=(-) 10\mu\text{A}, I_E=0$ | (-) 120 | | | V |
| | | [A1016, C2362] | | | | |
| | | $I_C=(-) 10\mu\text{A}, I_E=0$ | (-) 150 | | | V |
| | | [A1016K, C2362K] | | | | |
| C-E Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=(-) 1\text{mA}, R_{BE}=\infty$ | (-) 100 | | | V |
| | | [A1016, C2362] | | | | |
| | | $I_C=(-) 1\text{mA}, R_{BE}=\infty$ | (-) 120 | | | V |
| | | [A1016K, C2362K] | | | | |
| E-B Breakdown Voltage | $V_{(BR)EBO}$ | $I_E=(-) 10\mu\text{A}, I_C=0$ | (-) 5 | | | V |
| Noise Level | $V_{NO(ave)}$ | $V_{CC}=30\text{V}, I_C=1\text{mA}, R_g=56\text{k}\Omega$ $V_G=77\text{dB}/1\text{kHz}$ | | | 35 | mV |
| Noise Peak Level | $V_{NO(peak)}$ | " " " | | | 200 | mV |

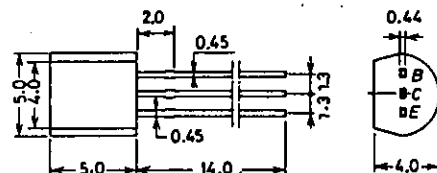
* The 2SA1016,K / 2SC2362,K are classified by 1mA h_{FE} as follows :

| | | | | | | | | |
|-----|---|-----|-----|---|-----|-----|---|-----|
| 160 | F | 320 | 280 | G | 560 | 480 | H | 960 |
|-----|---|-----|-----|---|-----|-----|---|-----|

Package Dimensions

(unit: mm)

2003A



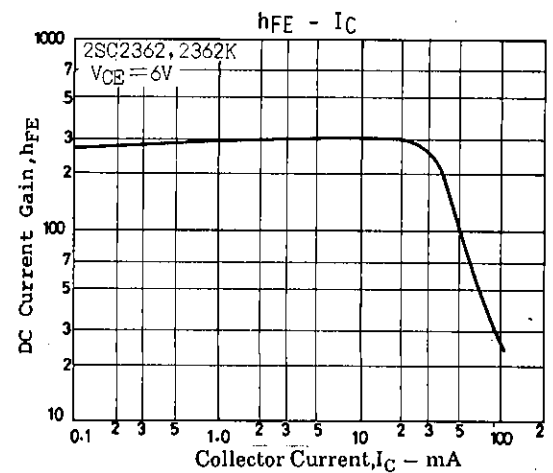
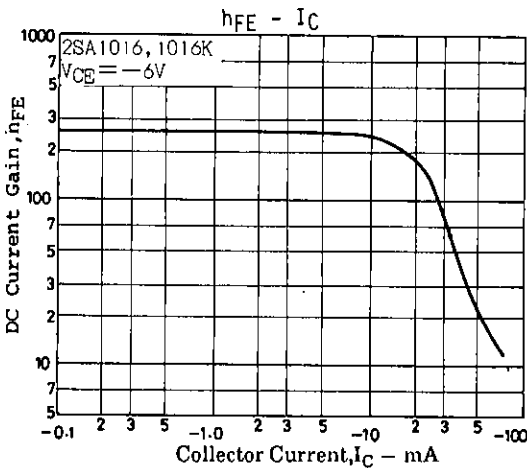
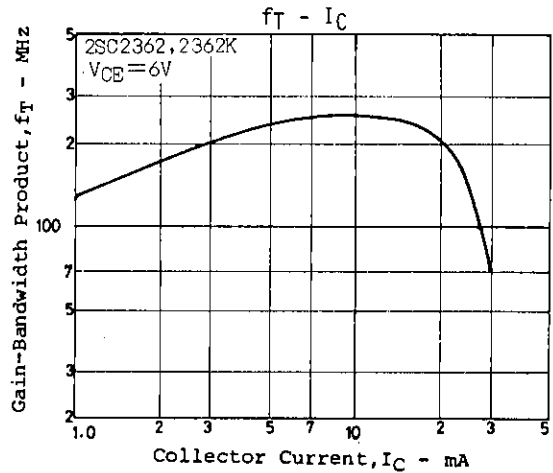
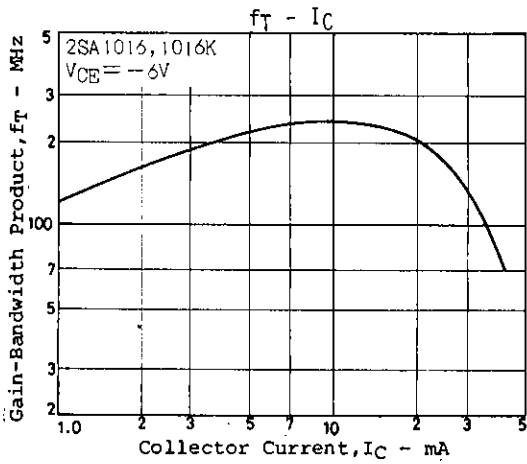
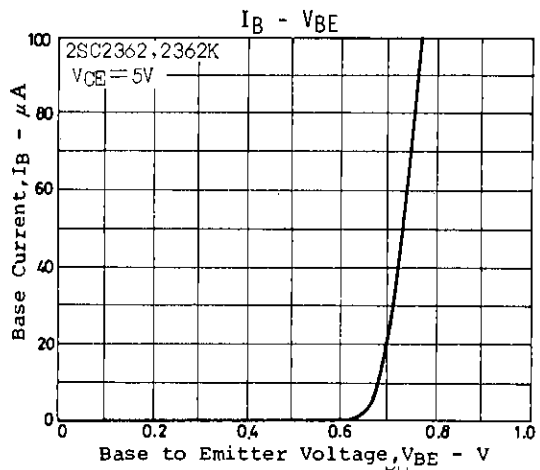
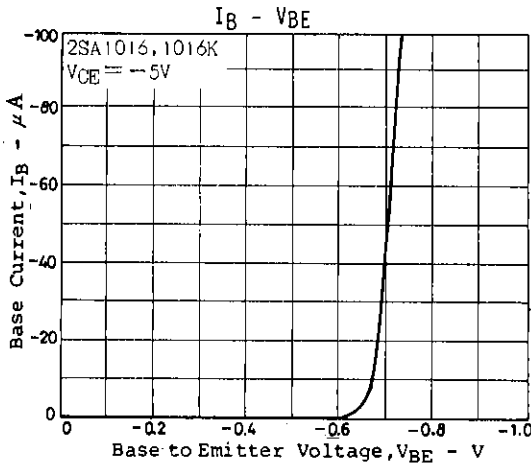
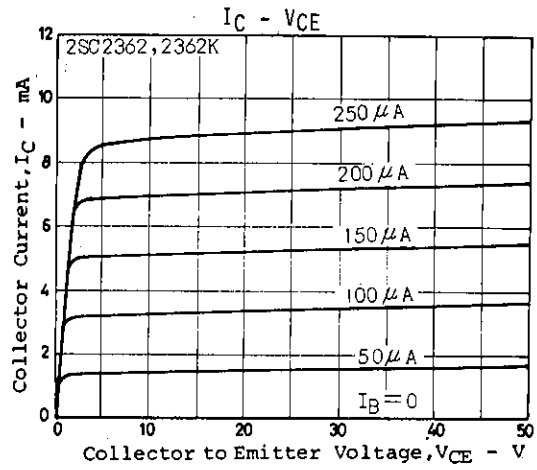
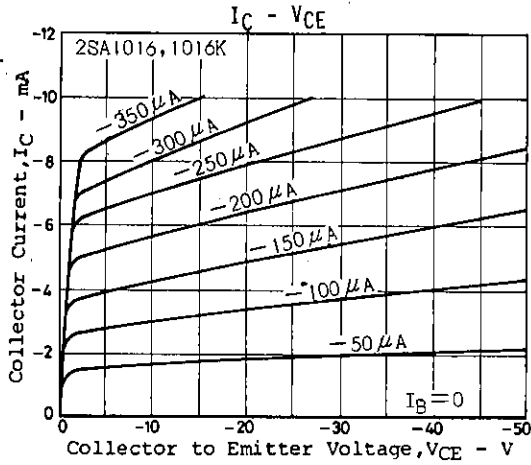
JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

B. Base
C. Collector
E. Emitter

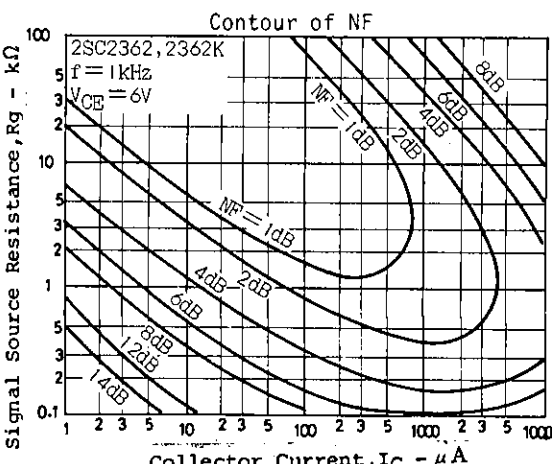
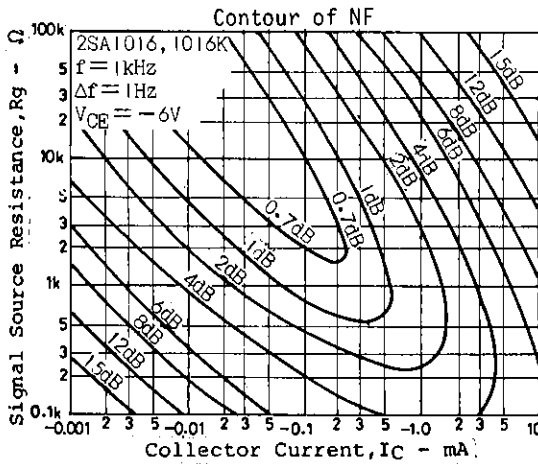
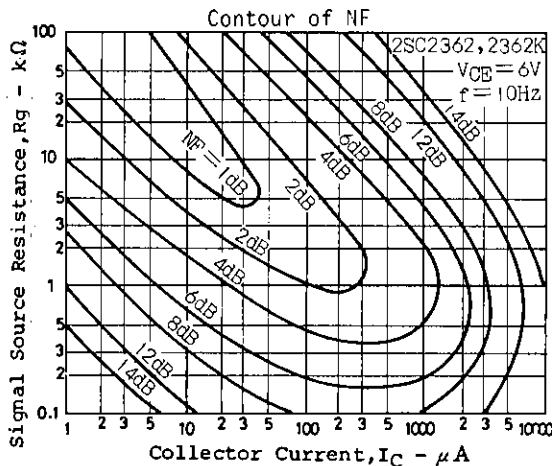
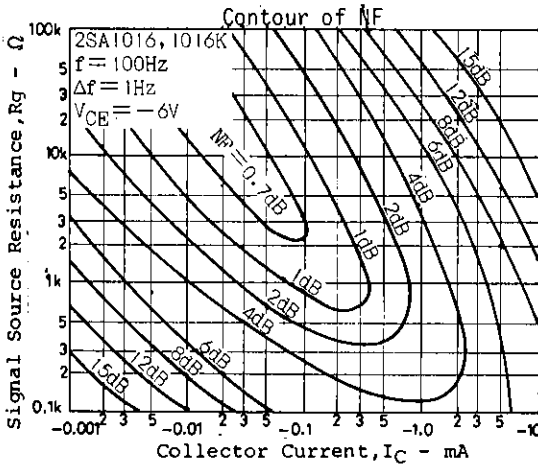
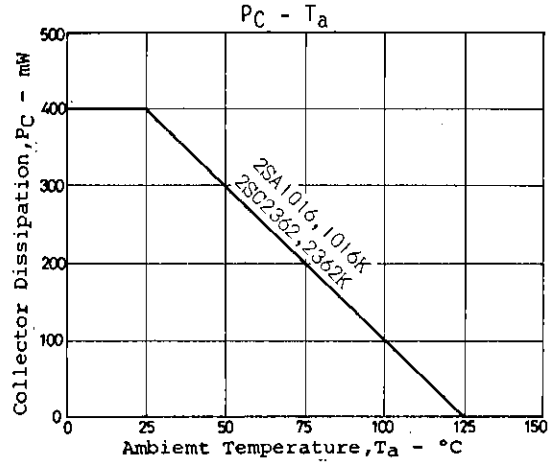
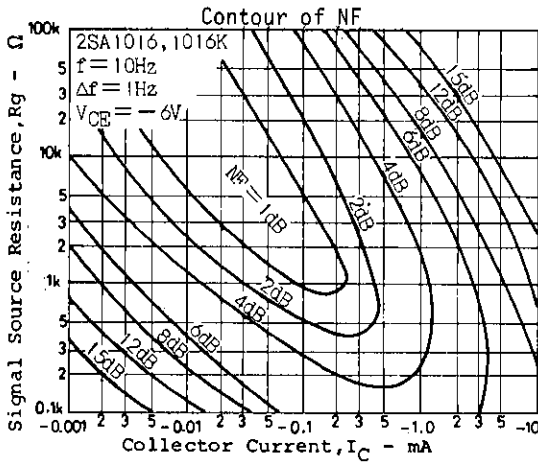
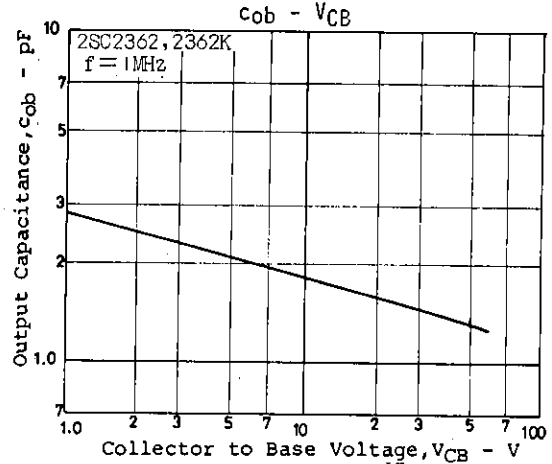
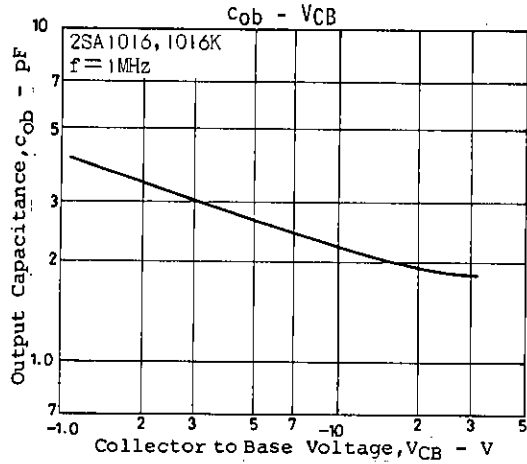
SANYO Electric Co., Ltd. Semiconductor Business Headquarters

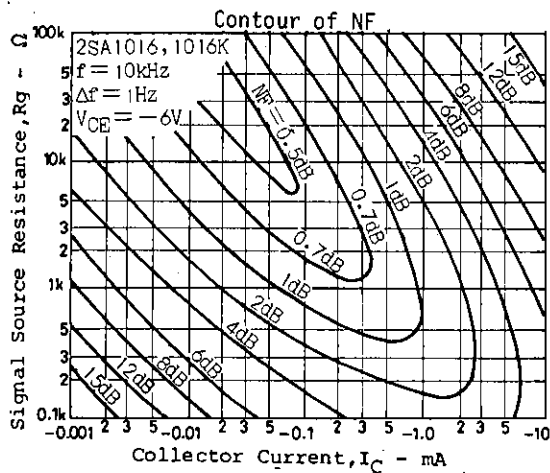
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2SA1016, 1016K/2SC2362, 2362K



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