

SANYO	No.572D	2SA1016,1016K/2SC2362, 2362K
		PNP/NPN Epitaxial Planar Silicon Transistors High-Voltage Low-Noise Amp Applications

(): 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

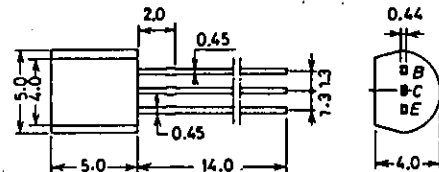
* The 2SA1016,K / 2SC2362,K are classified by 1mA h_{FE} as follows :

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

Package Dimensions

(unit: mm)

2003A



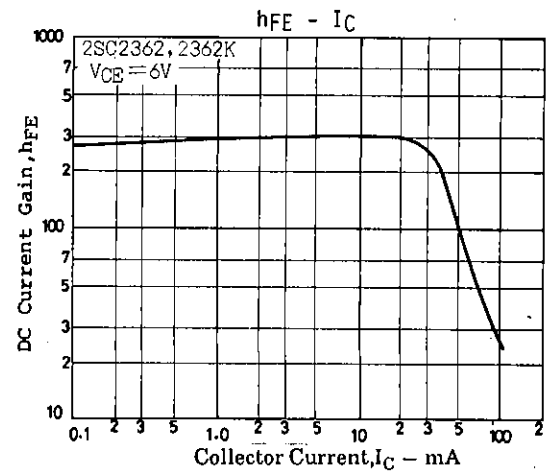
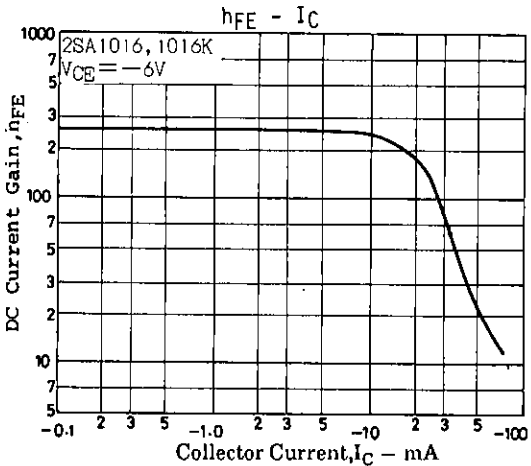
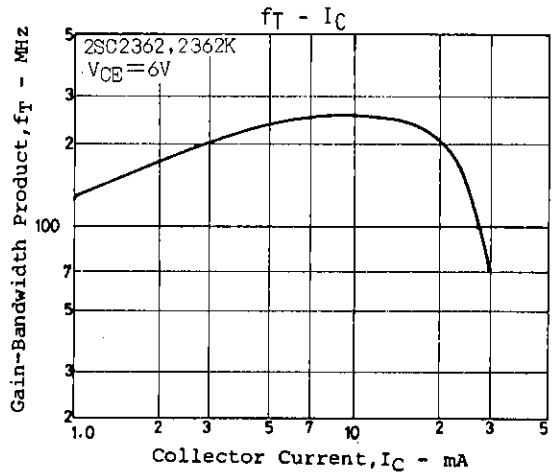
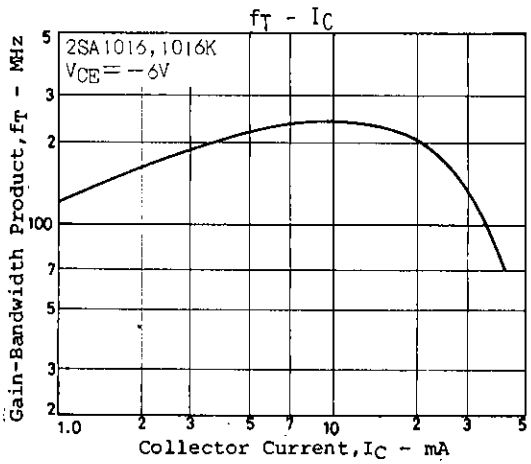
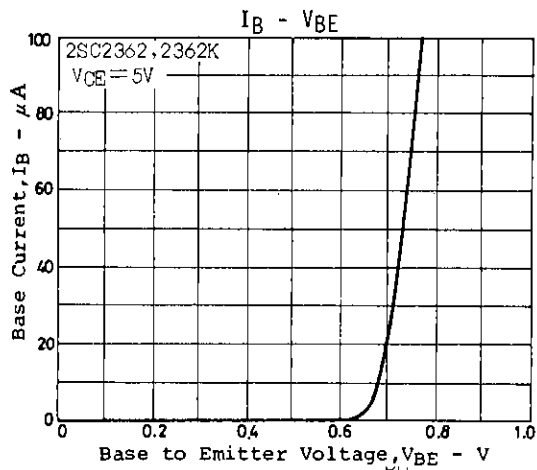
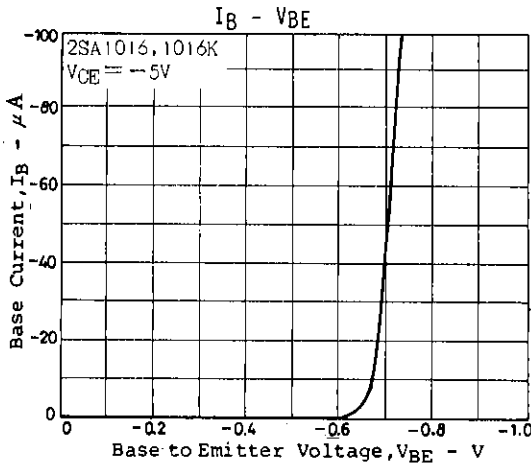
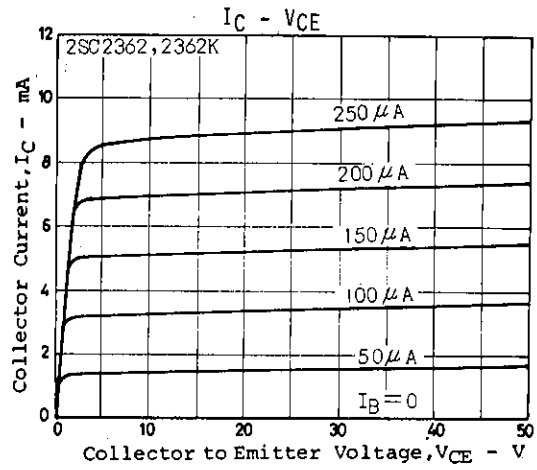
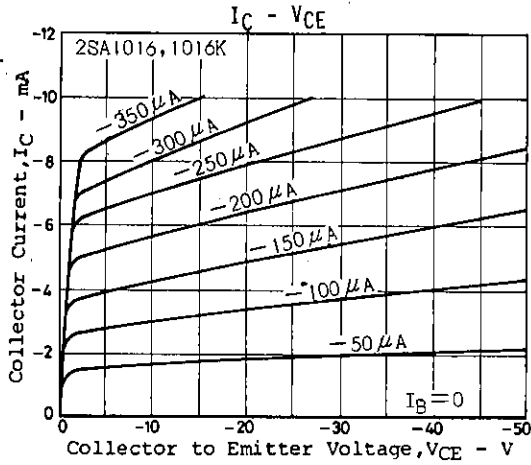
JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

B. Base
C. Collector
E. Emitter

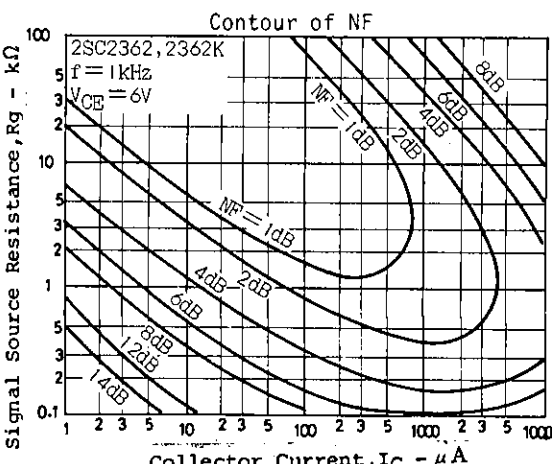
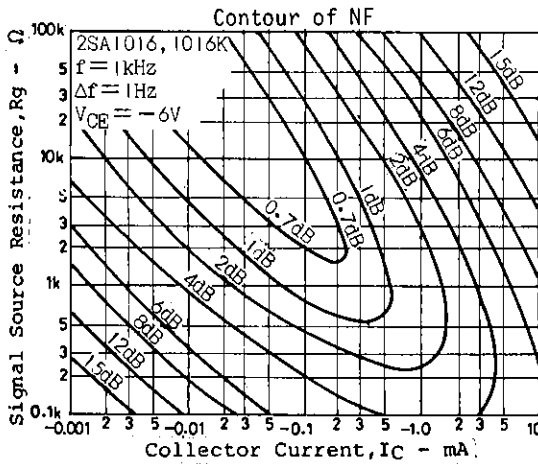
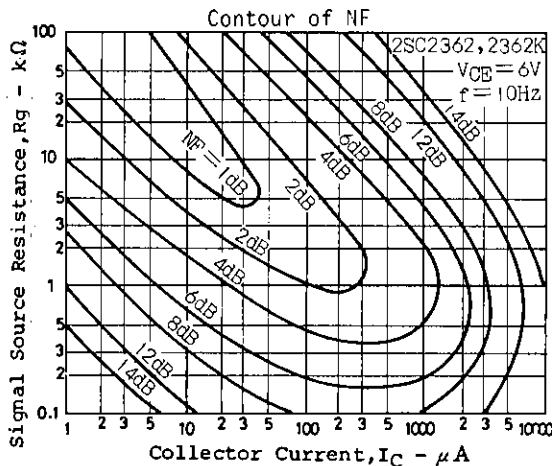
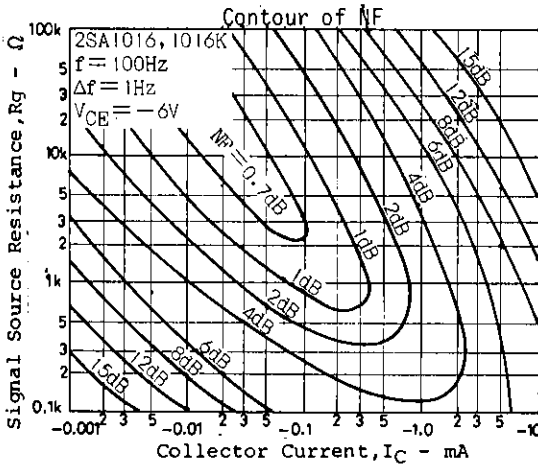
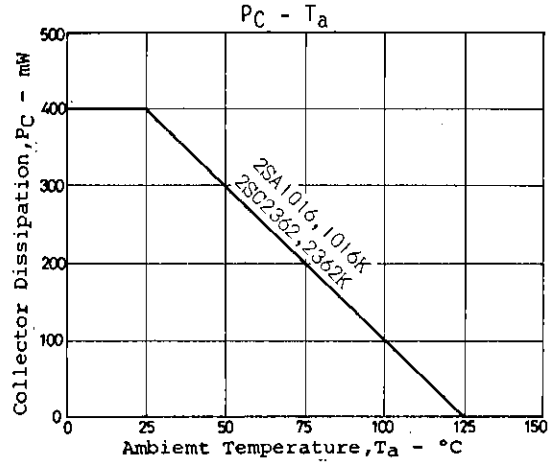
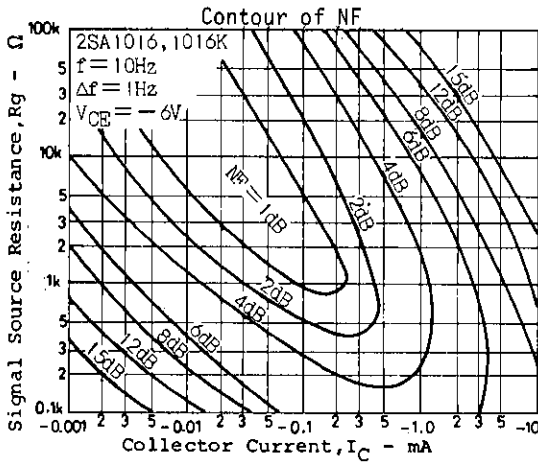
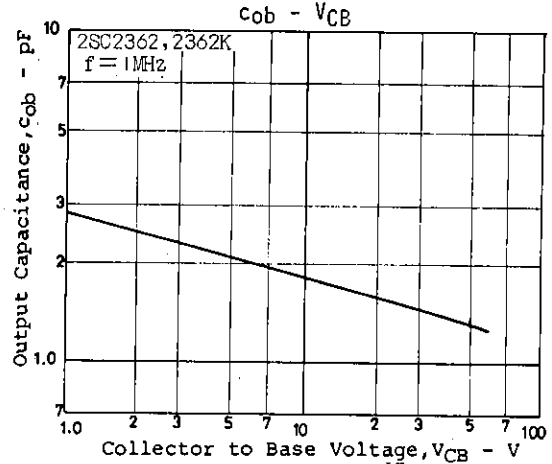
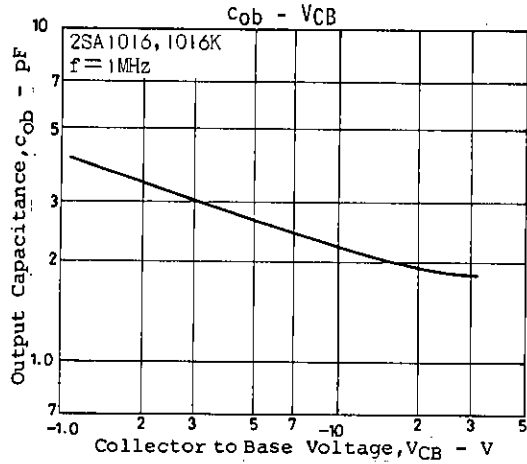
SANYO Electric Co., Ltd. Semiconductor Business Headquarters

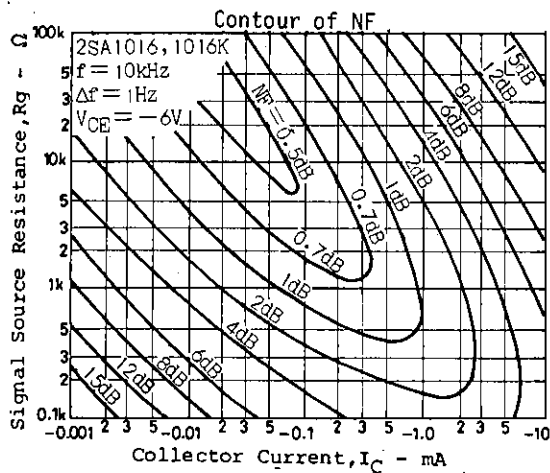
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

2SA1016, 1016K/2SC2362, 2362K



2SA1016, 1016K/2SC2362, 2362K





- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use.
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.