



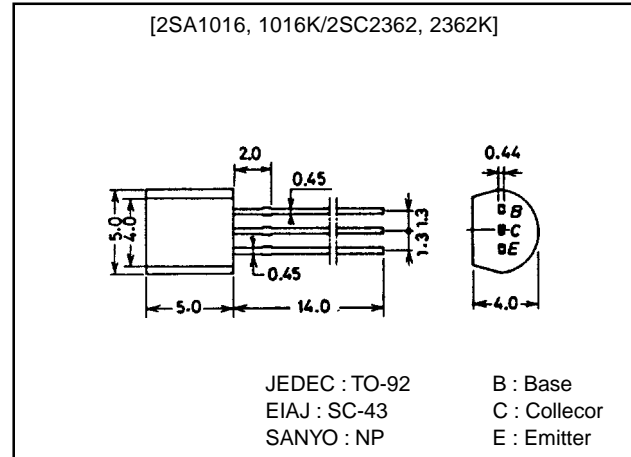
2SA1016, 1016K/2SC2362, 2362K

High-Voltage Low-Noise Amp Applications

Package Dimensions

unit:mm

2003A



() : 2SA1016, 1016K

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	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	°C
Storage Temperature	T _{stg}			-55 to +125	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)80V, I _E =0			(-)1.0	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0			(-)1.0	μA
DC Current Gain	h _{FE}	V _{CE} =(-)6V, I _C =(-)1mA	160*		960*	
Gain-Bandwidth Product	f _T	V _{CE} =(-)6V, I _C =(-)1mA		(110) 130		MHz
Output Capacitance	C _{ob}	V _{CB} =(-)10V, f=1MHz		(2.2) 1.8		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)10mA, I _B =(-)1mA			(-)0.5	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)10μA, I _E =0 [A1016, C2362]	(-)120			V
		I _C =(-)10μA, I _E =0 [A1016K, C2362K]	(-)150			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =(-)1mA, R _{BE} =∞ [A1016, C2362]	(-)100			V
		I _C =(-)1mA, R _{BE} =∞ [A1016K, C2362K]	(-)120			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =(-)10μA, I _C =0	(-)5			V
Noise Level	V _{NO(ave)}	V _{CC} =30V, I _C =1mA, R _g =56kΩ, V _G =77dB/1kHz			35	mV
Noise Peak Level	V _{NO(peak)}	V _{CC} =30V, I _C =1mA, R _g =56kΩ, V _G =77dB/1kHz			200	mV

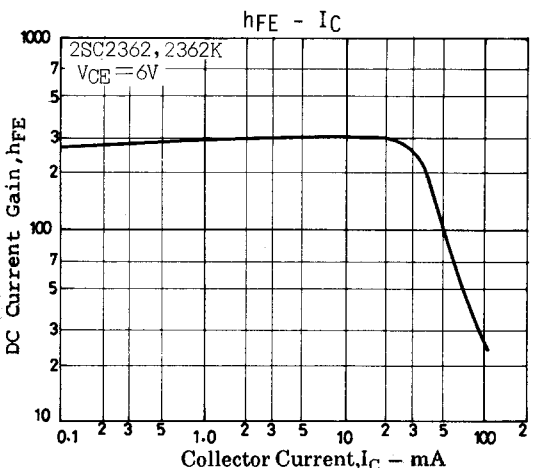
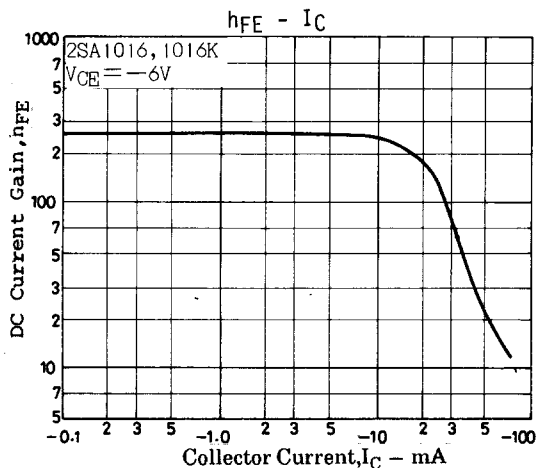
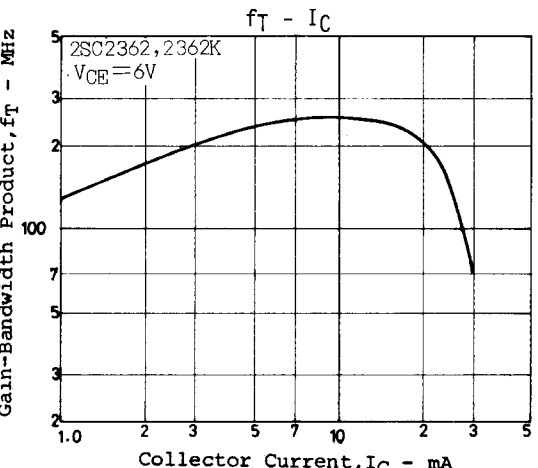
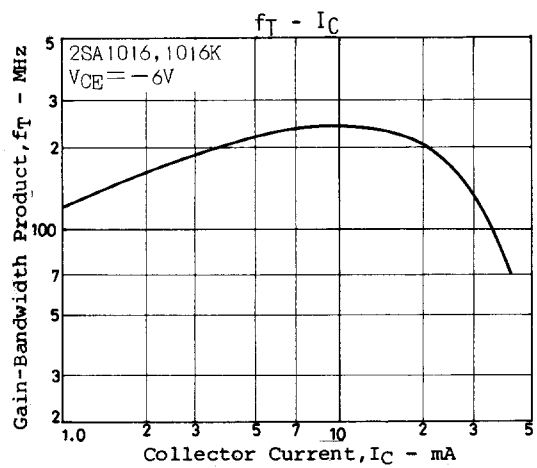
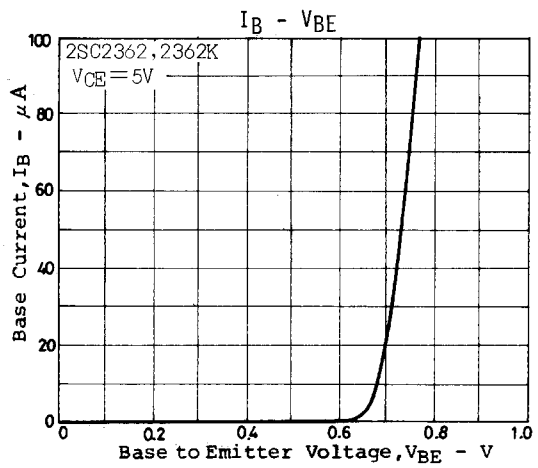
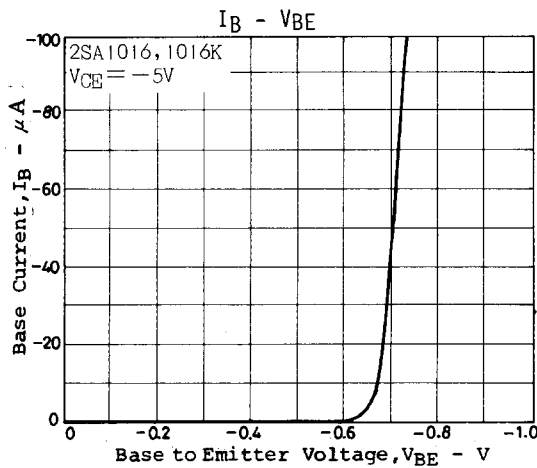
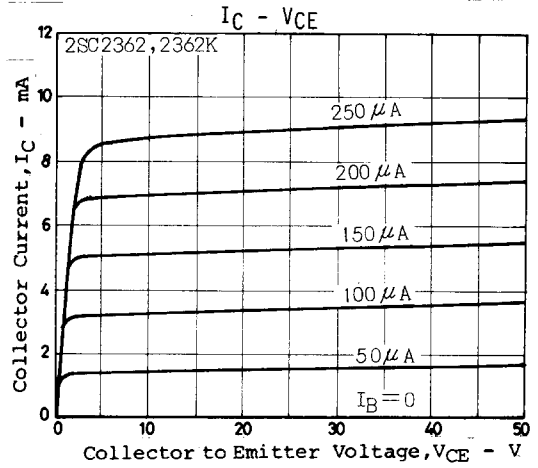
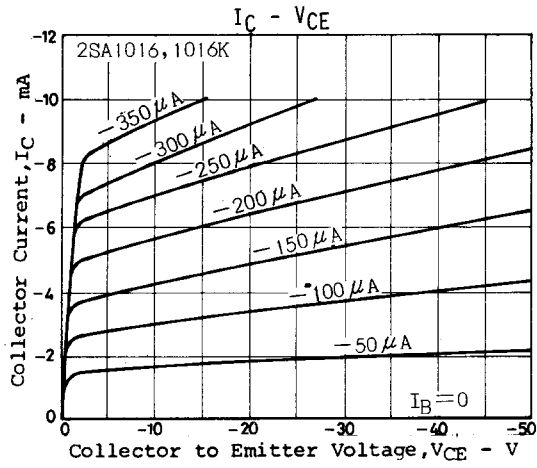
* : The 2SA1016, K/2SC2362, K are classified by 1mA h_{FE} as follows :

160	F	320	280	G	560	480	H	960
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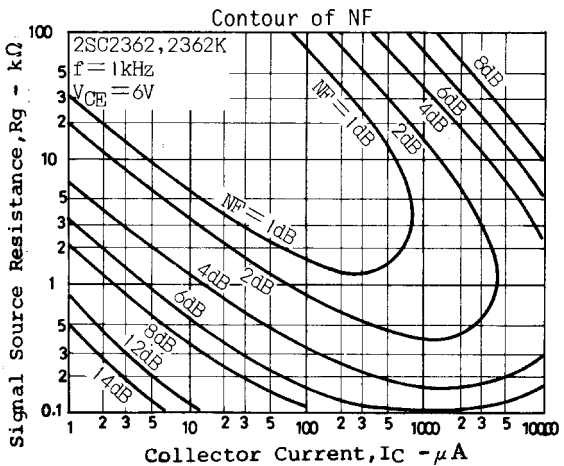
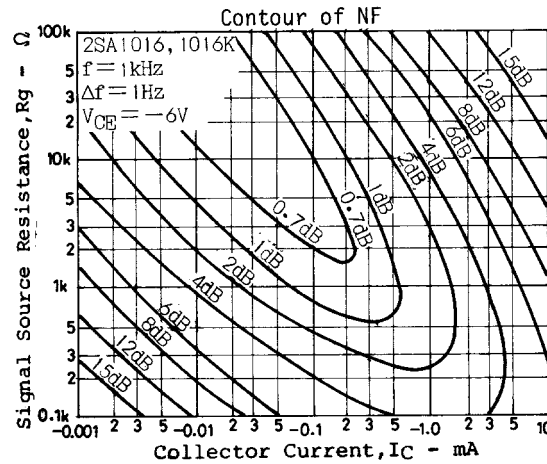
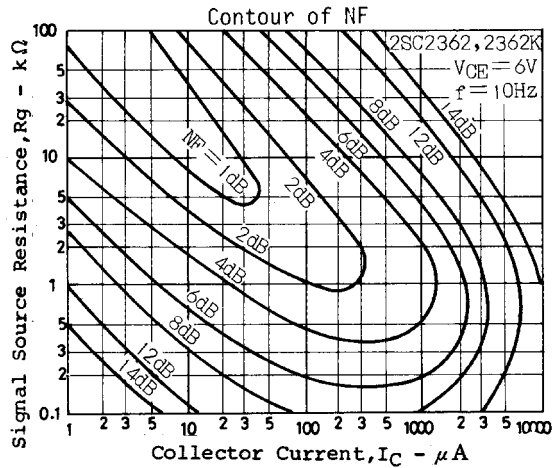
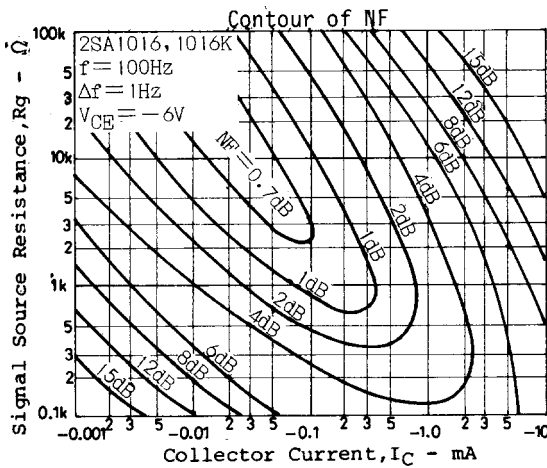
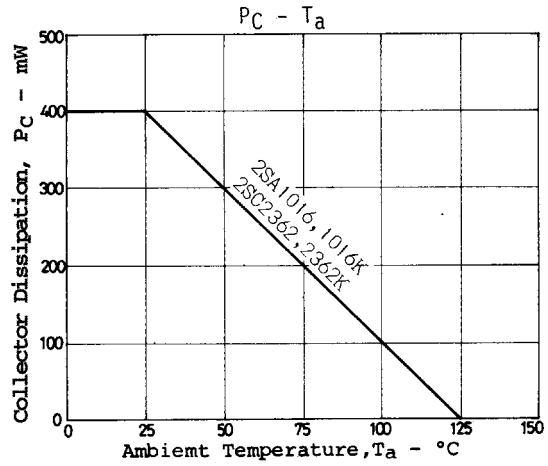
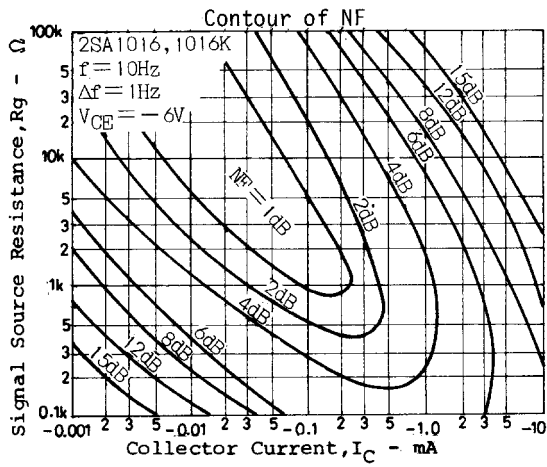
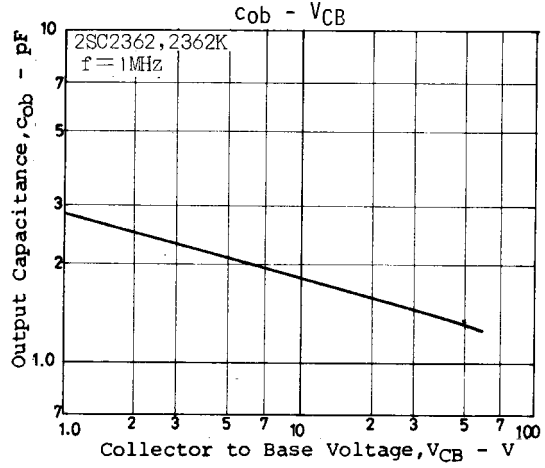
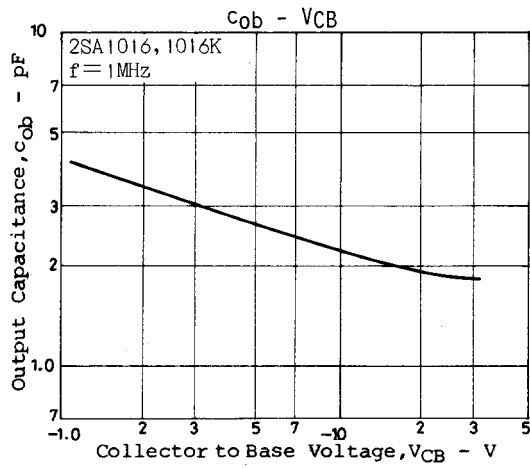
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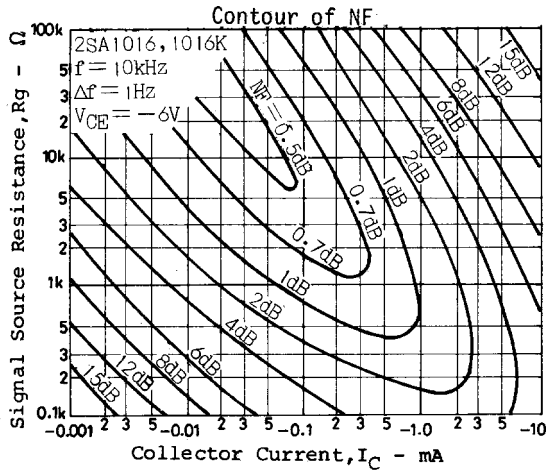
2SA1016, 1016K/2SC2362, 2362K



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