

SANYO	No. 978B	2SC3067
	NPN Epitaxial Planar Silicon Transistor DIFFERENTIAL AMP APPLICATIONS	

Features

- . Excellent in thermal equilibrium and suited for use in first-stage differential amp.
- . Low noise.
- . Matched pair capability.

Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V _{CB0}	130	V
Collector to Emitter Voltage	V _{CEO}	120	V
Emitter to Base Current	V _{EBO}	5	V
Collector Current	I _C	50	mA
Peak Collector Current	i _{cp}	100	mA
Collector Dissipation	P _C	200	mW
Total Dissipation	P _T	400	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

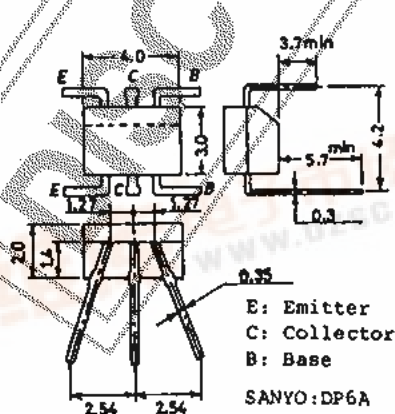
			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} =80V, I _E =0			0.1	µA
Emitter Cutoff Current	I _{EBO}	V _{EB} =4V, I _C =0			0.1	µA
DC Current Gain	h _{FE}	V _{CE} =6V, I _C =1mA	160*		960*	
DC Current Gain Ratio	h _{FE} (small/large)	V _{CE} =6V, I _C =1mA	0.85	0.98		
Base to Emitter Voltage Drop	V _{BE} (large-small)	V _{CE} =6V, I _C =1mA		1.0	10	mV
Collector to Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA		0.5		V
Gain-Bandwidth Product	f _T	V _{CE} =6V, I _C =1mA		130		MHz
Output Capacitance	c _{ob}	V _{CB} =10V, f=1MHz		1.6		pF

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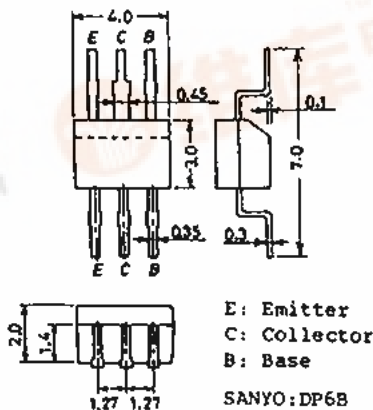
*: The 2SC3067 is classified by h_{FE}(small) as follows:

160	F	320	280	G	560	480	H	960
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Case Outline 2029A
(unit: mm)



Case Outline 2030A
(unit: mm)

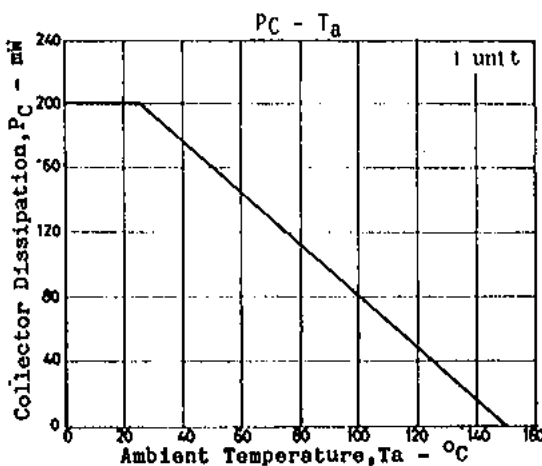
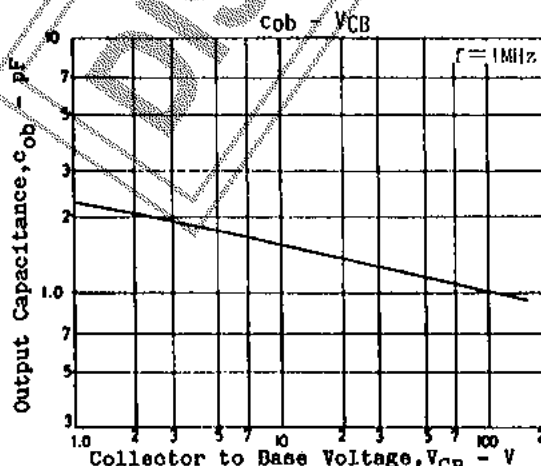
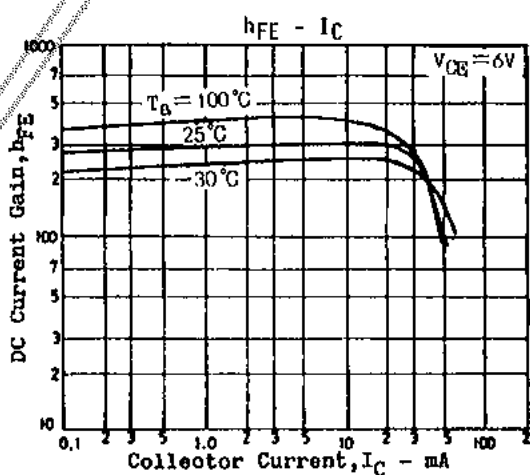
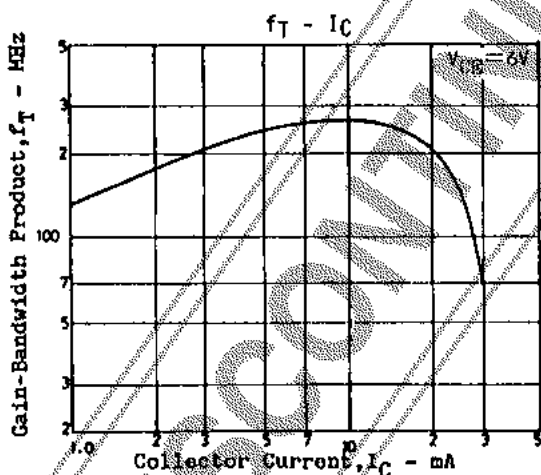
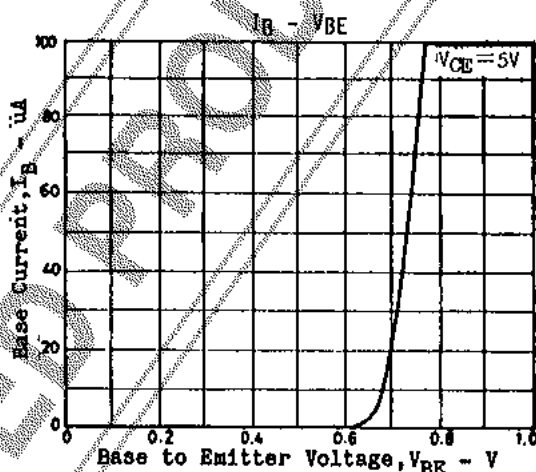
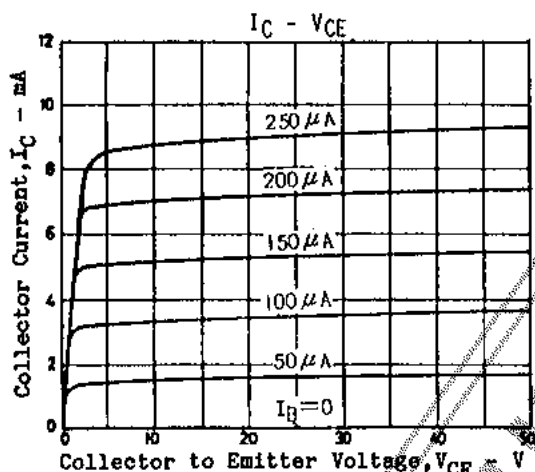


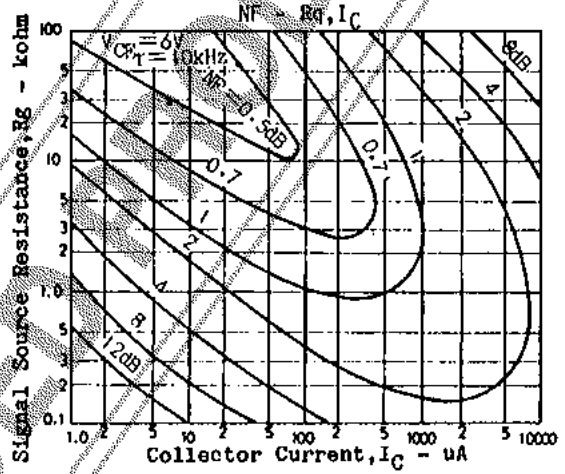
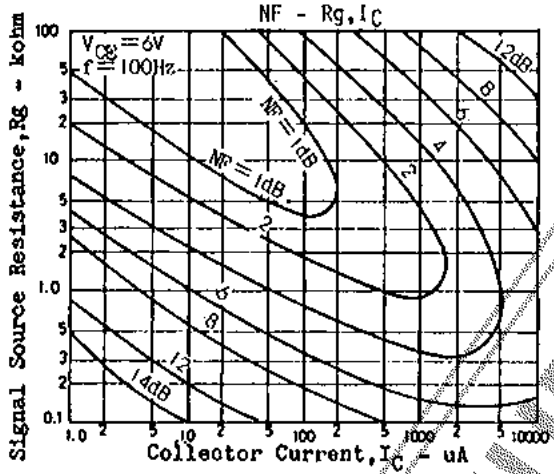
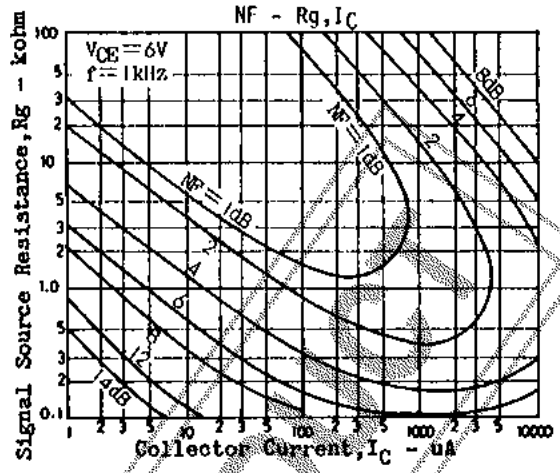
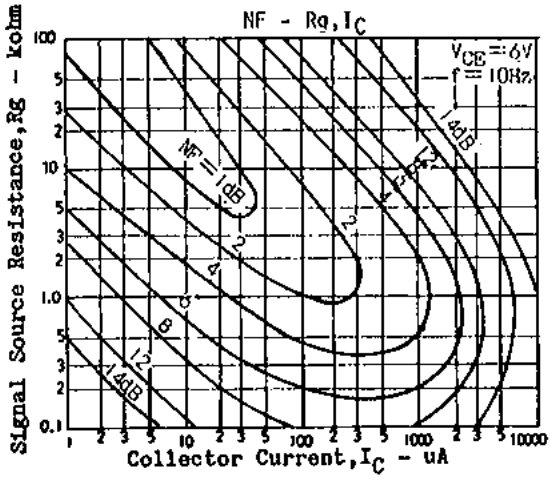
The application circuit diagrams and circuit constants herein are included as an example and provide no guarantee for designing equipment to be mass-produced. The information herein is believed to be accurate and reliable. However, no responsibility is assumed by SANYO for its use, nor for any infringements of patents or other rights of third parties which may result from its use.



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			min	typ	max	unit
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	130			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	120			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	5			V
Noise Level	$V_{NO(ave)}$	$V_{CC}=30V, I_C=1mA, R_g=56k\Omega, V_G=77dB/1kHz$			35	mV
Noise Peak Level	$V_{NO(peak)}$	$V_{CC}=30V, I_C=1mA, R_g=56k\Omega, V_G=77dB/1kHz$			200	mV





DISCONTINUED