

SANYO

No.976B

2SC3066

NPN Epitaxial Planar Silicon Transistor

DIFFERENTIAL AMP APPLICATIONS

Applications

- . Differential amp, current mirror

Features

- . Excellent in thermal equilibrium and suited for use in differential amp applications.
- . 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

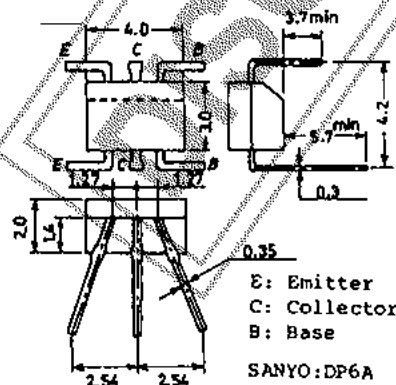
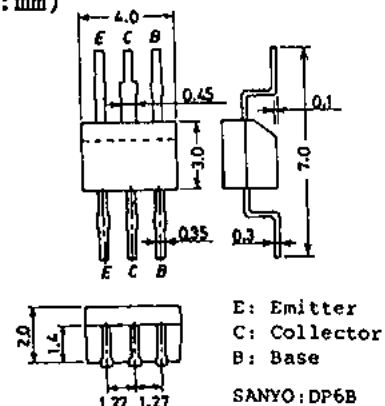
Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=80V, I_E=0$			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 2SC3066 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)

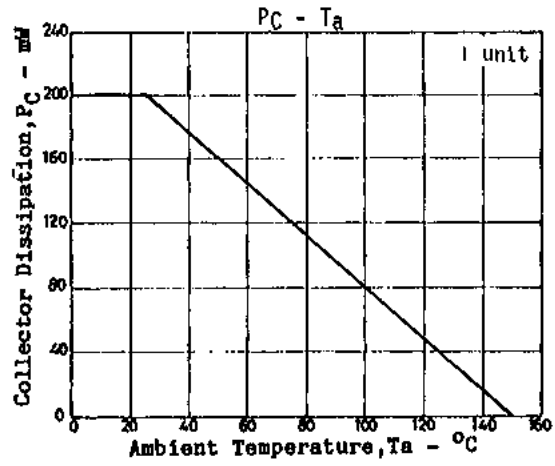
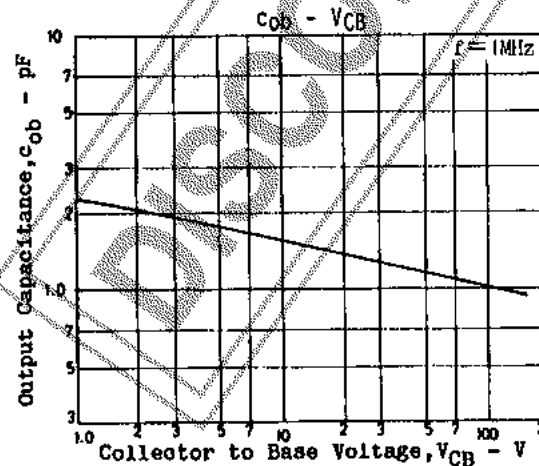
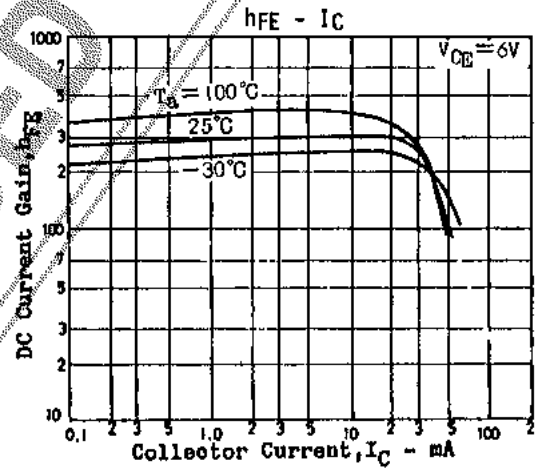
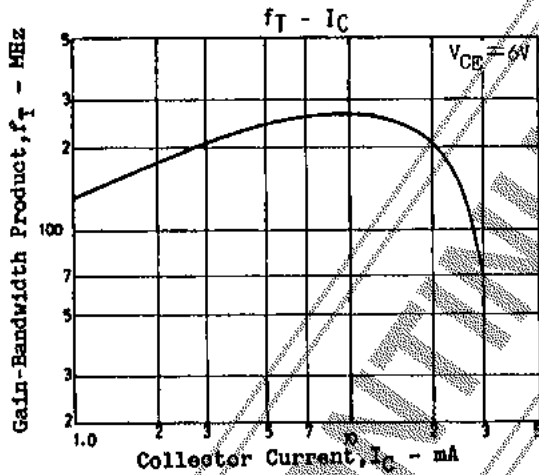
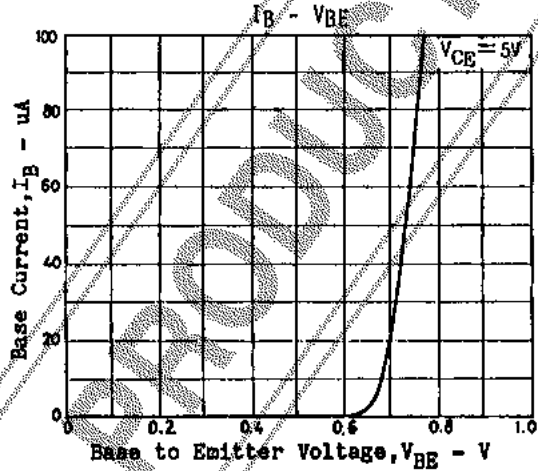
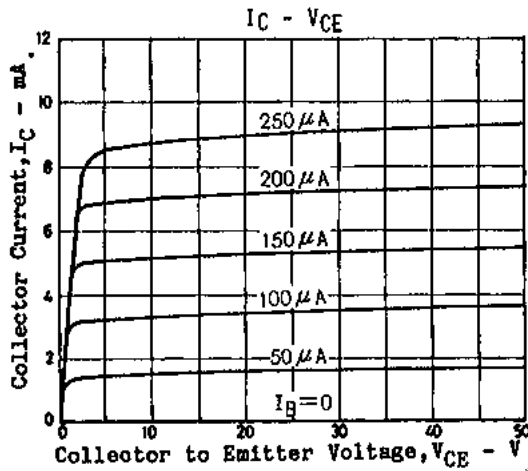
Specifications and information herein are subject to change without notice.

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4207KI/2145KI, TS No.976-1/2

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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



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