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_{CBO}		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	1 unit	200	mW
Total Dissipation	P_T		400	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-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	uA
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V, I_C=0			0.1	uA
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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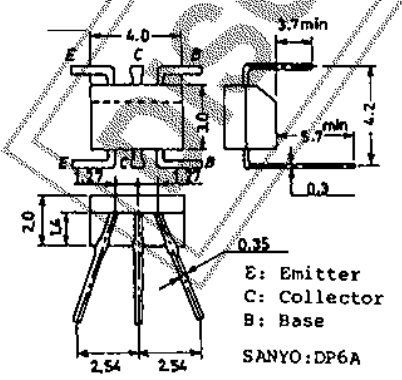
*:The 2SC3066 is classified by h_{FE}(small) as follows:

160 F 320	280 G 560	480 H 960

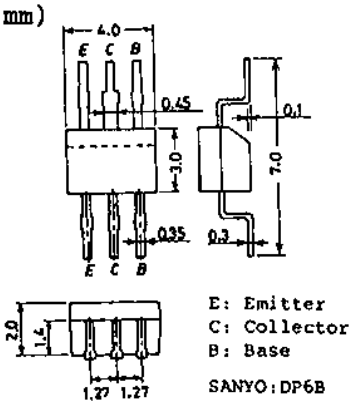
Case Outline 2029A
(unit:mm)



E: Emitter
C: Collector
B: Base

SANYO: DP6A

Case Outline 2030A
(unit:mm)



E: Emitter
C: Collector
B: Base

SANYO: DP6B

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			min	typ	max	unit
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=10uA,I_E=0	130			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA,R_{BE}=∞	120			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=10uA,I_C=0	5			V