


No.1684A



2SA1422/2SC3655

PNP/NPN Epitaxial Planar Silicon Transistors

Switching Applications

(with Bias Resistor)

Use

. Switching circuit, inverter circuit, interface circuit, driver circuit

Features

. With bias resistor (R1=46kΩ ,R2=23kΩ).

(): 2SA1422

Absolute Maximum Ratings at Ta=25°C

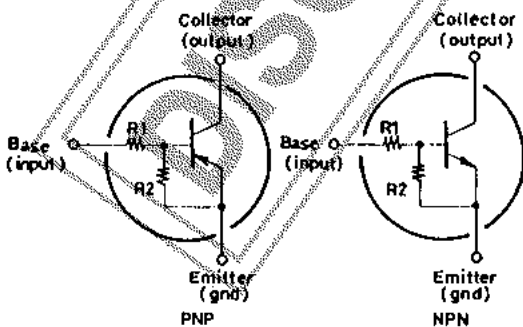
			unit
Collector to Base Voltage	V _{CB0}	(-)50	V
Collector to Emitter Voltage	V _{CEO}	(-)50	V
Emitter to Base Voltage	V _{EBO}	(-)10	V
Collector Current	I _C	(-)100	mA
Collector Current(Pulse)	I _{CP}	(-)200	mA
Collector Dissipation	P _C	400	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

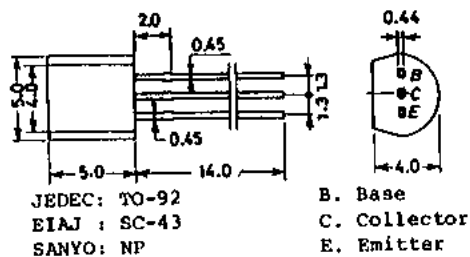
			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} =(-)40V, I _E =0		(-)0.1		μA
Collector Cutoff Current	I _{CEO}	V _{CE} =(-)40V, I _B =0		(-)0.5		μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)5V, I _C =0	(-)40	(-)72	(-)100	μA
DC Current Gain	h _{FE}	V _{CE} =(-)5V, I _C =(-)5mA	50			
Gain-Bandwidth Product	f _T	V _{CE} =(-)10V, I _C =(-)5mA		250		MHz
				(200)		
Output Capacitance	c _{ob}	V _{CB} =(-)10V, f=1MHz		3.7		pF
				(5.5)		
Collector to Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)5mA, I _B =(-)0.25mA	(-)0.1	(-)0.3		V
Collector to Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)10μA, I _E =0	(-)50			V
Collector to Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =(-)100μA, R _{BE} =∞	(-)50			V

Continued on next page.

Electrical Connection



Case Outline 2003A
(unit:mm)



Specifications and information herein are subject to change without notice.

SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

Continued from preceding page.

			min	typ	max	unit
Input OFF-State Voltage	$V_{I(off)}$	$V_{CE}=(-)5V, I_C=(-)100\mu A$	(-)1.2	(-)1.6	(-)2.3	V
Input ON-State Voltage	$V_{I(on)}$	$V_{CE}=(-)0.2V, I_C=(-)5mA$	(-)1.5	(-)3.1	(-)6.0	V
Input Resistance	R_I		32	46	60	k Ω
Resistance Ratio	R_1/R_2		1.8	2.0	2.2	-

Sample Application Circuit

