

	No.1287C	2SA1345/2SC3399 PNP/ NPN Epitaxial Planar Silicon Transistors Switching Applications (with Bias Resistance)

Applications

Switching circuit, inverter, interface circuit, driver

Features

- Built-in bias resistor ($R_1=47k\Omega$, $R_2=47k\Omega$).
- Small-sized package (SPA).

(): 2SA1345

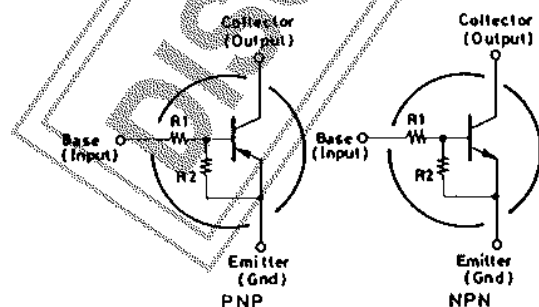
Absolute Maximum Ratings/ $T_a=25^\circ\text{C}$

		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	300 mW
Junction Temperature	T_j	150 $^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150 $^\circ\text{C}$

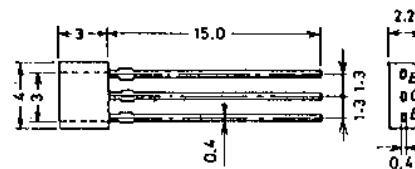
Electrical Characteristics/ $T_a=25^\circ\text{C}$

		min	typ	max	unit
Collector Cutoff Current	I_{CBO}			(-)0.1	μA
Collector Cutoff Current	I_{CEO}			(-)0.5	μA
Emitter Cutoff Current	I_{EBO}	(-)30	(-)53	(-)80	μA
DC Current Gain	h_{FE}	50			
Gain-bandwidth product	f_T		250 (200)		MHz
Output Capacitance	c_{ob}		3.7 (5.5)		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$		(-)0.1	(-)0.3	V

Continued on next page.

Electrical Connection**Case Outline 2033**

(unit: mm)



B: Base
C: Collector
E: Emitter
SANYO: SPA

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

3237KI/ 3075KI/ 4143KI, 1S, III No. 1287-1/2

2SA1345/2SC3399

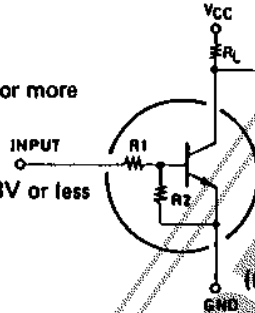
Continued from preceding page.

			min	typ	max	unit
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu A, I_E = 0$	$(-)50$			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)100\mu A, R_{BE} = \infty$	$(-)50$			V
Input Off Voltage	$V_{I(off)}$	$V_{CE} = (-)5V, I_C = (-)100\mu A$	$(-)0.8$	$(-)1.1$	$(-)1.5$	V
Input On Voltage	$V_{I(on)}$	$V_{CE} = (-)0.2V, I_C = (-)5mA$	$(-)1.0$	$(-)2.5$	$(-)5.0$	V
Input Resistance	R_1		32	47	62	k Ω
Input Resistance Ratio	R_1/R_2		0.9	1.0	1.1	—

■ Sample Application Circuit

Input ON-state voltage: 5V or more

Input OFF-state voltage: 0.8V or less



(For PNP, the polarity is reversed.)

