Ordering number: EN 2505

SANYO No.2505

2SA1582/2SC4113

PNP/ NPN Epitaxial Planar Silicon Transistors

Switching Applications (with Bias Resistance)

DISCONTINUED PRODUCT

Applications

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

Features

. On-chip bias resistance ($R_1=2.2k\Omega, R_2=\infty$)
. Small-sized package (SPA)

( ): 2SA1582

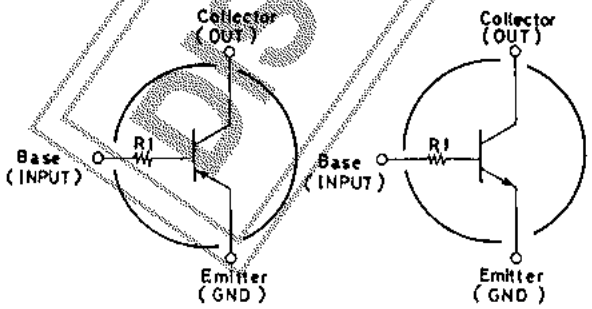
Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V_{CBO}	(-)50	V
Collector to Emitter Voltage	V_{CEO}	(-)50	V
Emitter to Base Voltage	V_{EBO}	(-)5	V
Collector Current	I_C	(-)100	mA
Collector Current (Pulse)	I_{CP}	(-)200	mA
Collector Dissipation	P_C	300	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55 to +150	°C

Electrical Characteristics at Ta=25°C

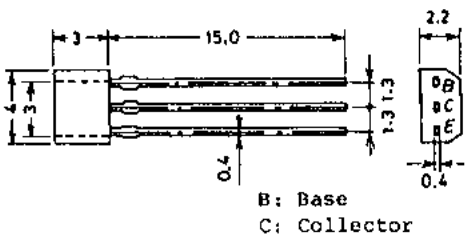
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB}=(-)40V, I_E=0			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=(-)5V, I_C=0			(-)0.1	μA
DC Current Gain	h_{FE}	V_{CE}=(-)5V, I_C=(-)10mA	100			
Gain-Bandwidth Product	f_T	V_{CE}=(-)10V, I_C=(-)5mA		250 (200)		MHz
Output Capacitance	C_{ob}	V_{CB}=(-)10V, f=1MHz		3.7 (5.5)		pF
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=(-)10mA, I_B=(-)0.5mA		(-)0.1	(-)0.3	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C=(-)10μA, I_E=0	(-)50			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C=(-)100μA, R_{BE}=∞	(-)50			V
Input OFF-State Voltage	$V_{I(off)}$	V_{CE}=(-)5V, I_C=(-)100μA	(-)0.4	(-)0.55	(-)0.8	V
Input ON-State Voltage	$V_{I(on)}$	V_{CE}=(-)0.2V, I_C=10mA	(-)0.6	(-)0.8	(-)1.5	V
Input Resistance	R1		1.5	2.2	2.9	kΩ

Electrical Connection



2SA1582(PNP) 2SC4113(NPN)

Case Outline 2033
(unit:mm)

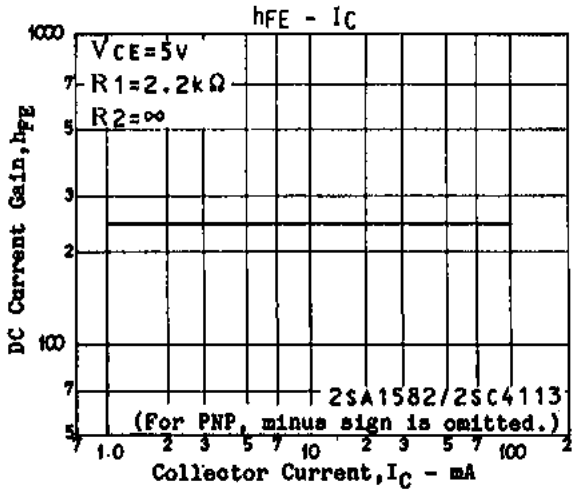


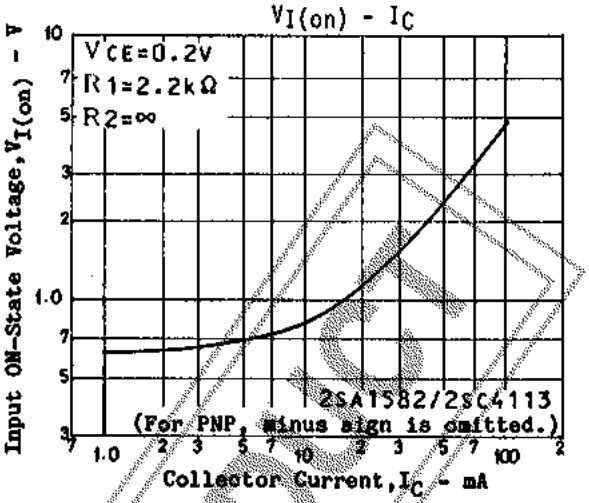
B: Base
C: Collector
E: Emitter

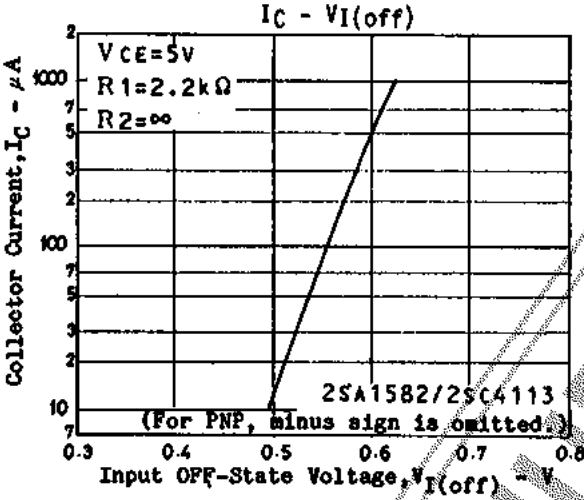
SANYO: SPA

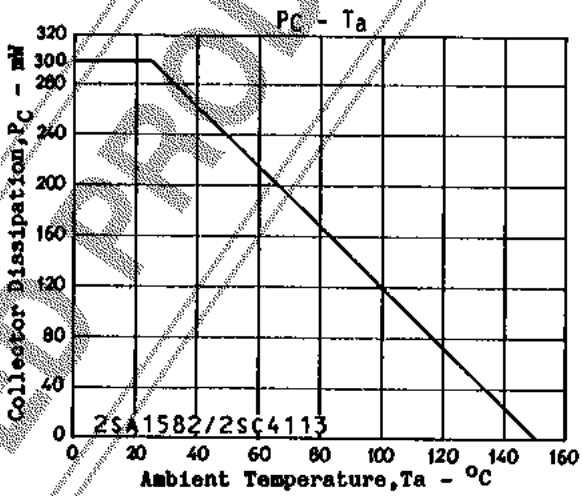
Specifications and information herein are subject to change without notice.

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DISCONTINUED PRODUCT