

SANYO

2 S C 4 2 9 2

NPN triple diffused planar silicon transistor

Package

- TO-3PB

Use

- Very high-definition color display, horizontal deflection output

Features

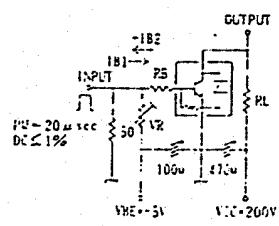
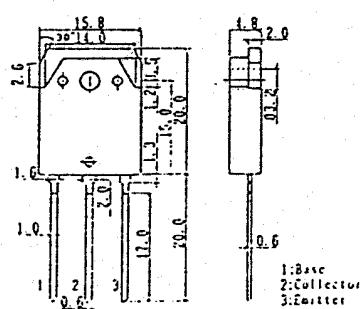
- High speed ($t_f=300\text{ns typ.}$)
- High breakdown voltage ($V_{CBO}=1500\text{V}$)
- High reliability (adoption of HVP process)
- Adoption of MBIT process
- On-chip damper diode

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

		unit
Collector to Base Voltage	V_{CBO}	1500 V
Collector to Emitter Voltage	V_{CEO}	800 V
Emitter to Base Voltage	V_{EBO}	7 V
Collector Current	I_C	6 A
Peak Collector Current	i_{cp}	16 A
Collector Dissipation	P_C	100 W
Junction Temperature	T_J	150 $^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150 $^\circ\text{C}$

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

		min	typ	max	unit
Collector Cutoff Current	I_{CES}	$V_{CE}=1500\text{V}$		1.0	mA
Collector Cutoff Current	I_{CBO}	$V_{CB}=800\text{V}$		10	uA
Collector Sustain Voltage	$V_{CEO}(\text{sus})$	$I_C=100\text{mA}, I_B=0$	800		V
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4\text{V}$	40	130	mA
Collector to Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C=5\text{A}, I_B=1.2\text{A}$		5	V
Base to Emitter Saturation Voltage	$V_{BE}(\text{sat})$	$I_C=5\text{A}, I_B=1.2\text{A}$		1.5	V
DC Current Gain	$h_{FE}(1)$	$V_{CE}=5\text{V}, I_C=1.0\text{A}$	8		
	$h_{FE}(2)$	$V_{CE}=5\text{V}, I_C=5\text{A}$	4	6	
Diode Forward Voltage	V_F	$I_{EC}=6\text{A}$		2.0	V
Storage Time	t_{stg}	$I_C=5\text{A}, I_{B1}=1\text{A}, I_{B2}=-2\text{A}$		3.0	us
Fall Time	t_f	$I_C=5\text{A}, I_{B1}=1\text{A}, I_{B2}=-2\text{A}$		0.3	us

Switching Time Test Circuit**Case Outline**
(unit:mm)

Specifications and information herein are subject to change without notice.

SANYO Electric Co.,Ltd. Semiconductor Overseas Marketing Div.
 Natsume Bldg., 18-6, 2-chome, Yushima, Bunkyo-ku, TOKYO 113 JAPAN