



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

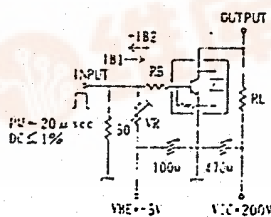
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

			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	$^\circ\text{C}$

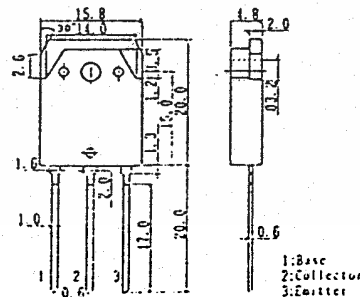
Electrical Characteristics at $T_a=25^\circ\text{C}$

			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	μA
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	μs
Fall Time	t_f	$I_C=5\text{A}, I_{B1}=1\text{A}, I_{B2}=-2\text{A}$			0.3	μs

Switching Time Test Circuit



Case Outline (unit:mm)



1:Base
2:Collector
3:Emitter

Specifications and information herein are subject to change without notice.

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