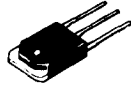


# 2SD1398



2022

NPN Triple Diffused Planar Silicon Transistor

## Color TV Horizontal Deflection Output Applications (with Damper Diode)

©1224C

### Features

- . High breakdown voltage and high reliability.
- . High switching speed.
- . Capable of being mounted in a variety of methods because of plastic molded package of one-point fixing type.

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

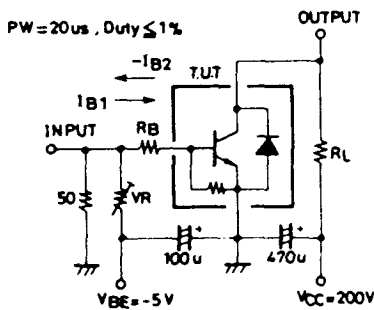
			unit
Collector to Base Voltage	$V_{CB0}$	1500	V
Collector to Emitter Voltage	$V_{CE0}$	800	V
Emitter to Base Voltage	$V_{EB0}$	7	V
Collector Current	$I_C$	5	A
Peak Collector Current	$i_{cp}$	16	A
Collector Dissipation	$P_C$	$T_C=25^\circ\text{C}$ 120	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

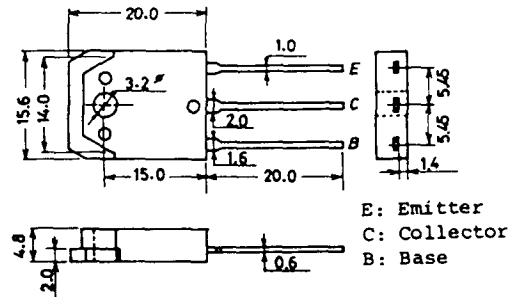
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=800\text{V}, I_E=0$			10	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$	40		130	mA
DC Current Gain	$h_{FE}$	$V_{CE}=5\text{V}, I_C=1\text{A}$	8			
Gain Bandwidth Product	$f_T$	$V_{CE}=10\text{V}, I_C=1\text{A}$		3		mHz
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4\text{A}, I_B=0.8\text{A}$			5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4\text{A}, I_B=0.8\text{A}$			1.5	V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=5\text{mA}, I_E=0$	1500			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=100\text{mA}, R_{BE}=\infty$	800			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=200\text{mA}, I_C=0$	7			V
Diode Forward Voltage	$V_F$	$I_{EC}=5\text{A}$			2	V
Fall Time	$t_f$	$I_C=4\text{A}, I_{B1}=0.8\text{A}, I_{B2}=-1.6\text{A}, V_{CC}=200\text{V}, R_L=50\text{ohm}$			0.4	us

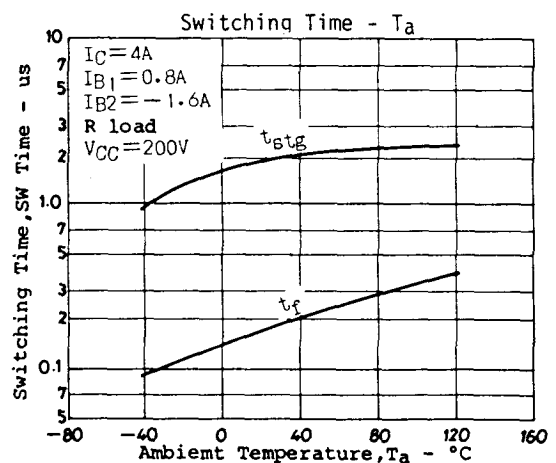
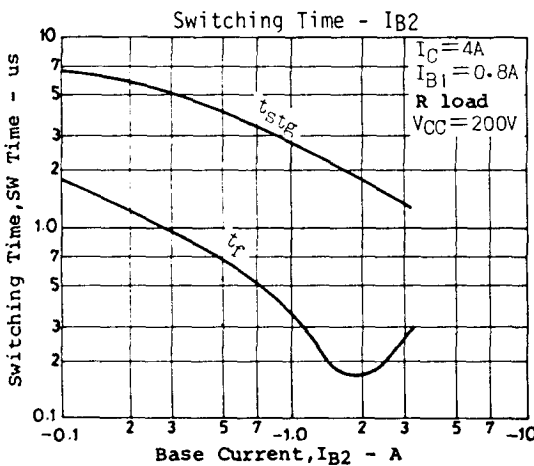
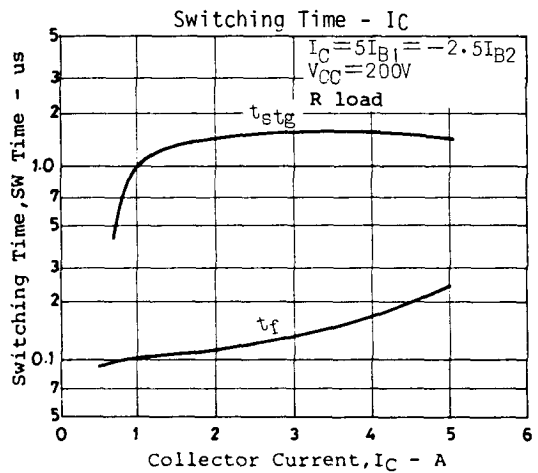
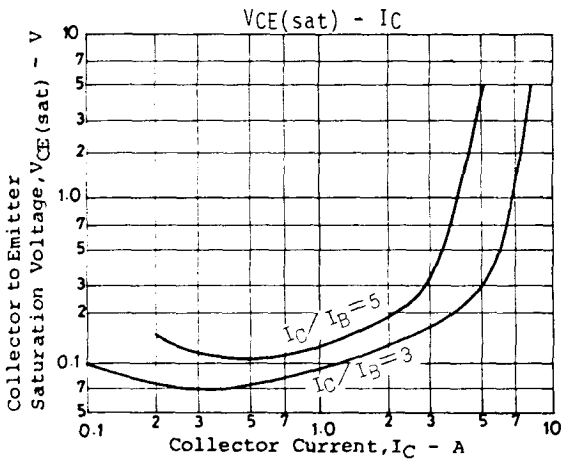
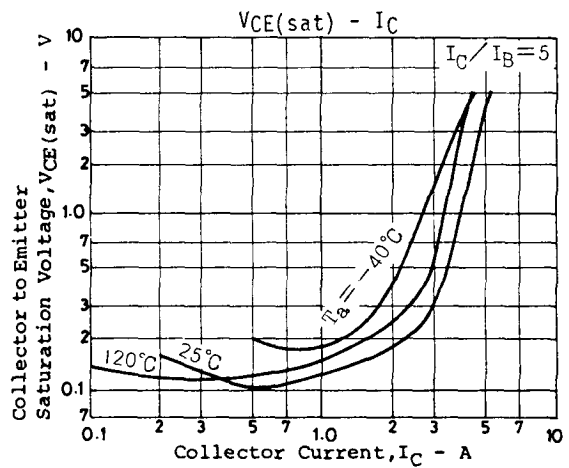
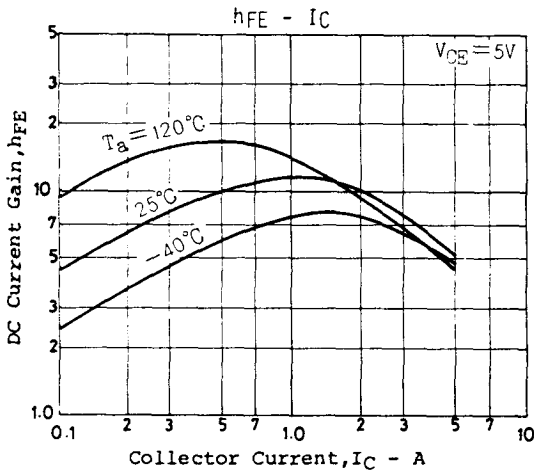
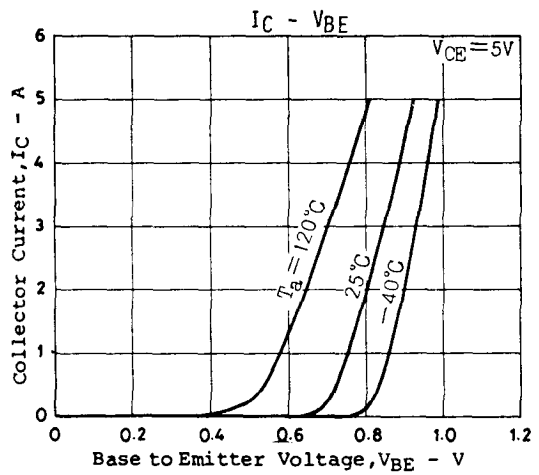
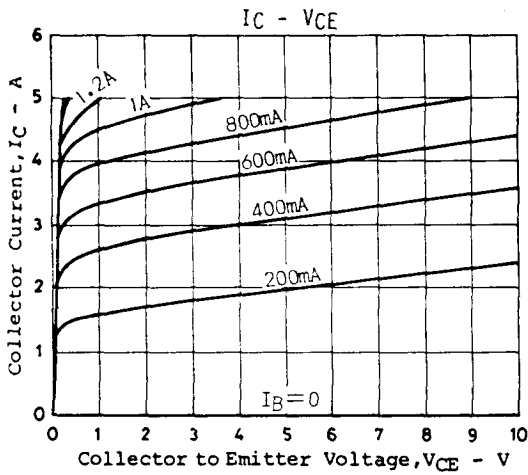


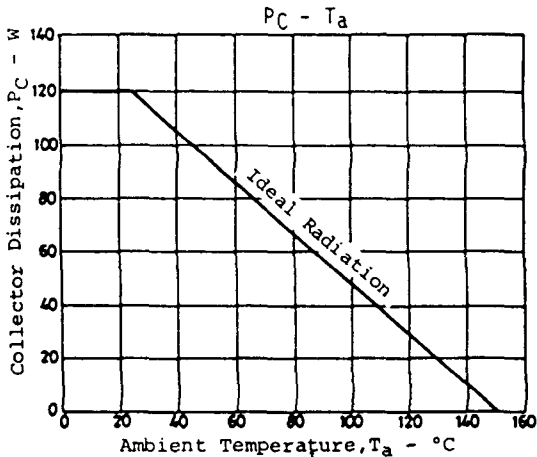
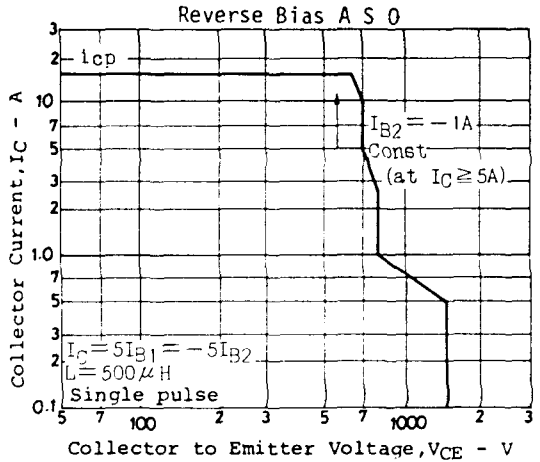
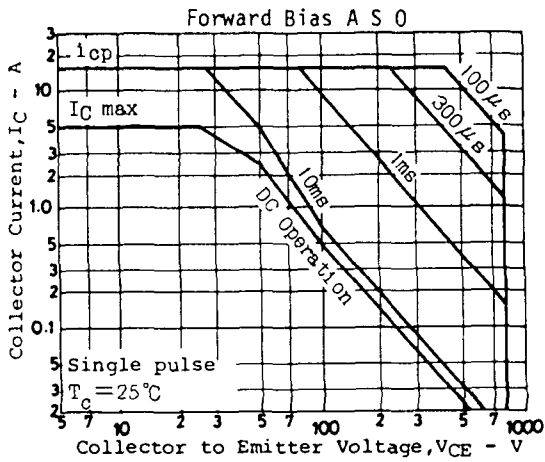
### Switching Time Test Circuit



### Case Outline 2022 (unit:mm)







Sample Application Circuit

