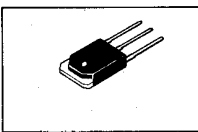




No.1223A

2SD1397



NPN Triple Diffused Planar Type Silicon Transistor
For Horizontal Output (Built-in Damper Diode)

Features:

- High Breakdown Voltage and High Reliability.
- High Switching Speed.
- Capable of being mounted easily due to one-point fixing type plastic mold package.

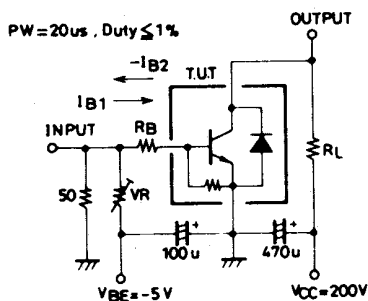
Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	VCBO	1500	V
Collector to Emitter Voltage	VCEO	800	V
Emitter to Base Voltage	VEBO	7	V
Collector Current	IC	3.5	A
Peak Collector Current	icp	10	A
Collector Dissipation	PC	80	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55 to +150	°C

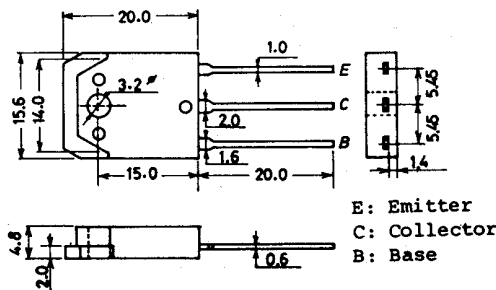
Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	ICBO	VCB=800V, IE=0			10	uA
Emitter Cutoff Current	IEBO	VEB=4V, IC=0	40		130	mA
DC Current gain	hFE	VCE=5V, IC=0.5A	8			
Gain Bandwidth Product	fT	VCE=10V, IC=0.5A		3		MHz
C-E Saturation Voltage	VCE(sat)	IC=2.5A, IB=0.8A			8	V
B-E Saturation Voltage	VBE(sat)	IC=2.5A, IB=0.8A			1.5	V
C-B Breakdown Voltage	V(BR)CBO	IC=5mA, IE=0	1500			V
C-E Breakdown Voltage	V(BR)CEO	IC=100mA, RBE=∞	800			V
E-B Breakdown Voltage	V(BR)EBO	IE=200mA, IC=0	7			V
Diode Forward Voltage	VF	IEC=3.5A			2	V
Fall Time	tf	IC=3A, IB1=0.8A, IB2=-1.6A VCC=200V, RL=66.7ohm			0.7	us

Switching Time Test Circuit



**Case Outline 2022
(unit:mm)**



These specifications are subject to change without notice.

TOKYO SANYO ELECTRIC CO., LTD. SEMICONDUCTOR DIVISION
15-13, 6-CHOME, SOTOKANDA, CHIYODA-KU, TOKYO 101 JAPAN



NPN TRIPLE DIFFUSED PLANAR SILICON TRANSISTOR

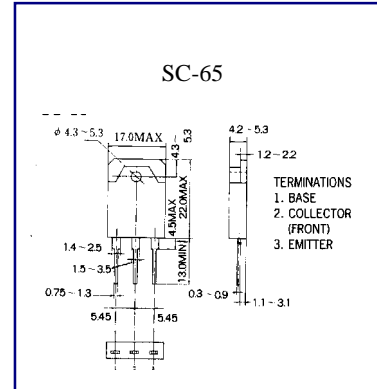
2SD1397

**COLOR TV HORIZONTAL OUTPUT
APPLICATIONS(Damper Diode BUILT IN)**

- High Collector-Base Voltage($V_{CBO}=1500V$)
- High Speed Switching

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	1500	V
Collector-Emitter Voltage	V_{CEO}	1500	V
Emitter-Base voltage	V_{EBO}	6	V
Collector Current (DC)	I_C	3.5	A
Collector Dissipation ($T_c=25^{\circ}C$)	P_C	50	W
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature	T_{stg}	-50~150	$^{\circ}C$



ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}C$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector- Emitter Cutoff Current($V_{BE}=0$)	I_{CES}	$V_{CE}=1400V$,			1.0	mA
Collector Cutoff Current	I_{CBO}	$R_{BE}=0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{CB}=800V$, $I_E=0$			1.0	mA
DC Current Gain	h_{FE}	$V_{EB}=4V$, $I_C=0$	8			
Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	$V_{CE}=5V$, $I_C=1A$, $I_C=2.5A$, $I_B=0.8A$			8.0	V