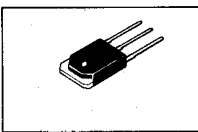




No.1223A

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.

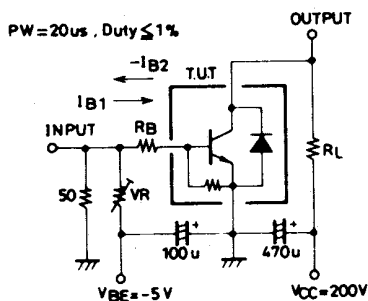
Absolute Maximum Ratings at Ta=25°C

| | | | 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 |

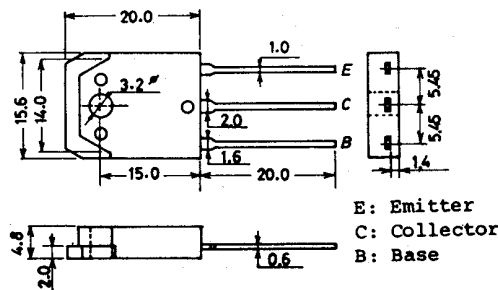
Electrical Characteristics at Ta=25°C

| | | | 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)**



E: Emitter
C: Collector
B: Base

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