

# 2SD1576

## Silicon NPN Triple-Diffused Junction Mesa Type

### Horizontal Deflection Output

#### ■ Features

- High breakdown voltage and high reliability by glass passivation
- High speed switching
- Wide area of safety operation (ASO)
- "Full Pack" package for simplified mounting on a heat sink with one screw

#### ■ Absolute Maximum Ratings (T<sub>c</sub>=25°C)

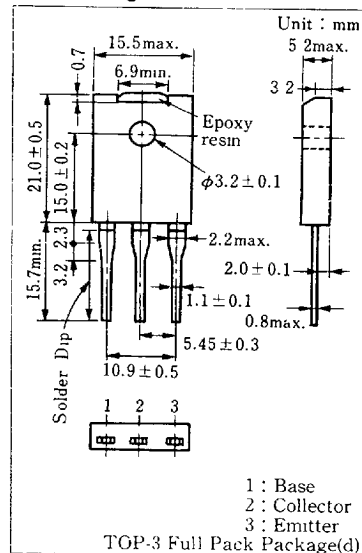
| Item                        | Symbol             | Value                 | Unit |   |
|-----------------------------|--------------------|-----------------------|------|---|
| Collector-base voltage      | V <sub>CB0</sub>   | 1500                  | V    |   |
|                             | V <sub>CE(s)</sub> | 1500                  | V    |   |
| Collector-emitter voltage   | V <sub>CE0</sub>   | 700                   | V    |   |
|                             | V <sub>EB0</sub>   | 6                     | V    |   |
| Collector current           | I <sub>C</sub>     | 2                     | A    |   |
| Peak collector current      | I <sub>CP</sub> *  | 6                     | A    |   |
| Peak base current           | I <sub>BP</sub>    | 2.5                   | A    |   |
| Reverse peak base current   | I <sub>BP</sub>    | -1.5                  | A    |   |
| Collector power dissipation | P <sub>C</sub>     | T <sub>c</sub> = 25°C | 80   | W |
|                             |                    | T <sub>a</sub> = 25°C | 2.5  |   |
| Junction temperature        | T <sub>J</sub>     | 150                   | °C   |   |
| Storage temperature         | T <sub>stg</sub>   | -55 ~ +150            | °C   |   |

\* Non repetitive peak value

#### ■ Electrical Characteristics (T<sub>c</sub>=25°C)

| Item                                 | Symbol               | Condition  | min. | typ. | max. | Unit |
|--------------------------------------|----------------------|--|------|------|------|------|
| Collector cutoff current             | I <sub>CBO</sub>     | V <sub>CB</sub> = 750V, I <sub>E</sub> = 0               |      |      | 50   | μA   |
|                                      |                      | V <sub>CB</sub> = 1500V, I <sub>E</sub> = 0              |      |      | 1    | mA   |
| Emitter-base voltage                 | V <sub>EB0</sub>     | I <sub>E</sub> = 1 mA, I <sub>C</sub> = 0                | 6    |      |      | V    |
| DC current gain                      | h <sub>FF</sub>      | V <sub>CE</sub> = 5V, I <sub>C</sub> = 2A                | 2    |      | 5    |      |
| Collector-emitter saturation voltage | V <sub>CE(sat)</sub> | I <sub>C</sub> = 2A, I <sub>B</sub> = 1A                 |      |      | 5    | V    |
| Base-emitter saturation voltage      | V <sub>BE(sat)</sub> | I <sub>C</sub> = 2A, I <sub>B</sub> = 1A                 |      |      | 1.5  | V    |
| Transition frequency                 | f <sub>1</sub>       | V <sub>CL</sub> = 10V, I <sub>C</sub> = 0.5A, f = 0.5MHz |      | 2    |      | MHz  |
| Fall time                            | t <sub>f</sub>       | I <sub>C</sub> = 2.5A, I <sub>Bend</sub> = 1.1A          |      |      | 1    | μs   |
| Storage time                         | t <sub>stg</sub>     | L <sub>B</sub> = 10 μH                                   |      |      | 9    | μs   |

#### ■ Package Dimensions



■ 6932852 0016768 30T ■

