



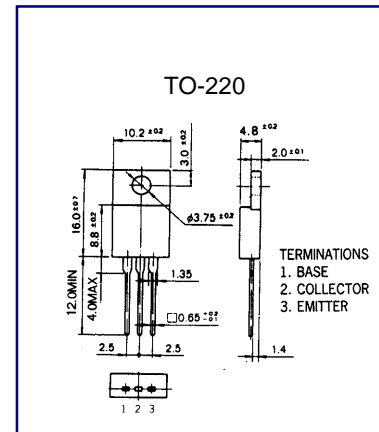
**2SD1128**

**NPN SILICON DARLINGTON TRANSISTOR**

**SWITCHING REGULATORS PWM INVERTERS  
SOLENOID AND RELAY DRIVERS**

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

| Characteristic                                   | Symbol    | Rating  | Unit             |
|--|-----------|---------|------------------|
| Collector-Base Voltage                           | $V_{CB0}$ | 150     | V                |
| Collector-Emitter Voltage                        | $V_{CE0}$ | 100     | V                |
| Collector Current (DC)                           | $I_C$     | 5       | A                |
| Collector Dissipation ( $T_c=25^\circ\text{C}$ ) | $P_C$     | 30      | W                |
| Junction Temperature                             | $T_j$     | 150     | $^\circ\text{C}$ |
| Storage Temperature                              | $T_{stg}$ | -50~150 | $^\circ\text{C}$ |



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

| Characteristic                        | Symbol        | Test Condition                       | Min  | Typ | Max | Unit          |
|---------------------------------------|---------------|--------------------------------------|------|-----|-----|---------------|
| Collector Cutoff Current              | $I_{CBO}$     | $V_{CB}=150\text{V}, I_E=0$          |      |     | 10  | $\mu\text{A}$ |
| Collector Cutoff Current              | $I_{CEO}$     | $V_{CB}=150\text{V}, I_B=0$          |      |     | 10  | $\mu\text{A}$ |
| DC Current Gain                       | $h_{FE}$      | $V_{CE}=4\text{V}, I_C=1.0\text{A}$  | 5000 |     |     |               |
| Collector- Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=0.5\text{A}, I_B=0.001\text{A}$ |      |     | 1.5 | V             |