



STC05DE150

HYBRID EMITTER SWITCHED BIPOLAR TRANSISTOR ESBT™ 1500 V - 5 A - 0.10 Ω

DATA BRIEF

Table 1: General Features

| V _{CS(ON)} | I _C | R _{CS(ON)} |
|---------------------|----------------|---------------------|
| 0.5 V | 5 A | 0.01 Ω |

- HIGH VOLTAGE / LOW CURRENT CASCODE CONFIGURATION
- LOW EQUIVALENT ON RESISTANCE
- VERY FAST-SWITCH UP TO 150 kHz
- SQUARED RBSOA, UP TO 1500 V
- VERY LOW C_{ISS} DRIVEN BY R_G = 47 Ω

APPLICATION

- SINGLE SWITCH SMPS BASED ON THREE PHASE MAINS

DESCRIPTION

The STC05DE150 is manufactured in a hybrid structure, using dedicated high voltage Bipolar and low voltage MOSFET technologies, aimed to providing the best performance in ESBT topology. The STC05DE150 is designed for use in aux flyback smps for any three phase application.

Figure 1: Package

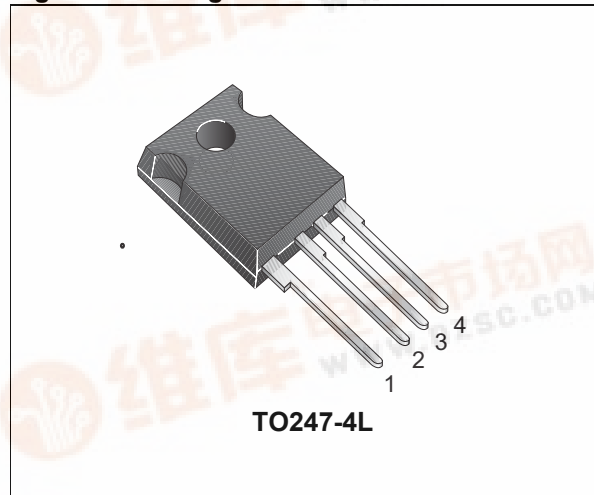


Figure 2: Internal Schematic Diagram

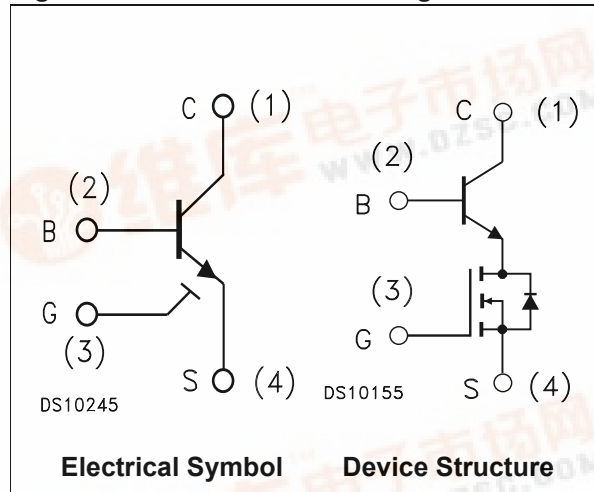


Table 2: Order Code

| Part Number | Marking | Package | Packaging |
|-------------|------------|----------|-----------|
| STC05DE150 | STC05DE150 | TO247-4L | TUBE |



TO247-4L MECHANICAL DATA

| DIM. | mm | | |
|------|-------|-------|-------|
| | MIN. | TYP. | MAX. |
| A | 4.85 | | 5.15 |
| A1 | 2.20 | | 2.60 |
| b | 0.95 | 1.10 | 1.30 |
| b1 | 1.30 | | 1.70 |
| b2 | 2.50 | | 2.90 |
| c | 0.40 | | 0.80 |
| D | 19.85 | | 20.15 |
| E | 15.45 | | 15.75 |
| e | | 2.54 | |
| e1 | | 5.08 | |
| L | 14.20 | | 14.80 |
| L1 | 3.70 | | 4.30 |
| L2 | | 18.50 | |
| ØP | 3.55 | | 3.65 |
| ØR | 4.50 | | 5.50 |
| S | | 5.50 | |

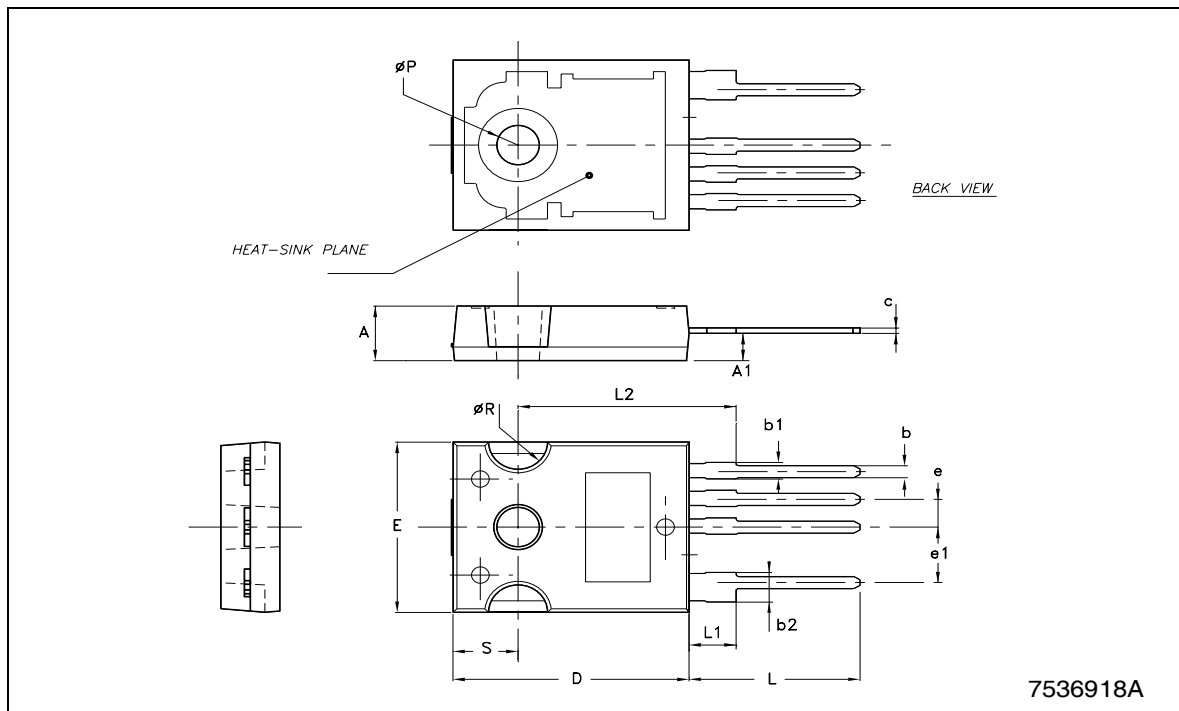


Table 3: Revision History

| Date | Release | Change Designator |
|-------------|----------------|--------------------------|
| 29-Mar-2005 | 1 | First Release. |

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