

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

Figure 1: Package

**DATA BRIEF** 

**Table 1: General Features** 

V <sub>CS(ON)</sub>	Ic	R <sub>CS(ON)</sub>
0.5 V	5 A	0.01 Ω

- HIGH VOLTAGE / LOW CURRENT CASCODE CONFIGURATION
- n LOW EQUIVALENT ON RESISTANCE
- NERY FAST-SWITCH UP TO 150 kHz
- n SQUARED RBSOA, UP TO 1500 V
- $_{\rm n}$  VERY LOW C<sub>ISS</sub> DRIVEN BY RG = 47  $\Omega$

#### **APPLICATION**

n 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.



TO247-4L

Figure 2: Internal Schematic Diagram

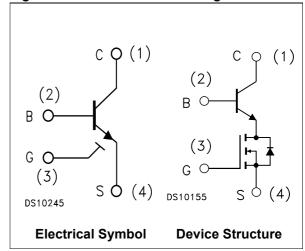


Table 2: Order Code

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

Rev. 1

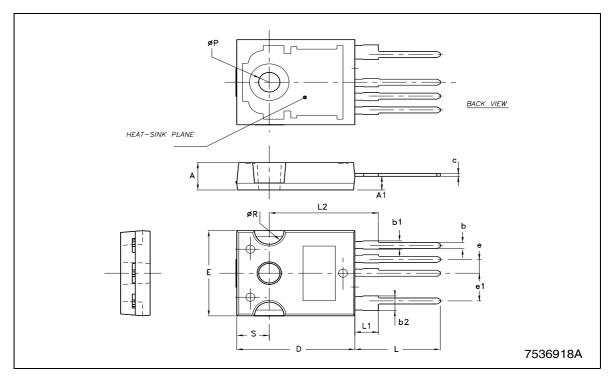
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## **TO247-4L MECHANICAL DATA**

DIM.	mm		
	MIN.	TYP.	MAX.
Α	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
С	0.40		0.80
D	19.85		20.15
Е	15.45		15.75
е		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	



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**Table 3: Revision History** 

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

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