

Philips Semiconductors

Object specification

**Silicon Diffused Power Transistor****BU4530AW****GENERAL DESCRIPTION**

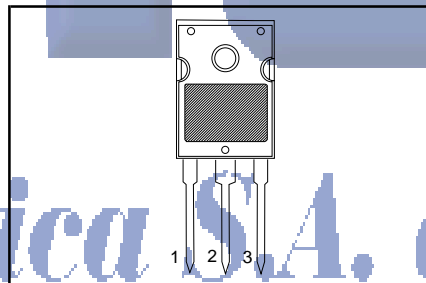
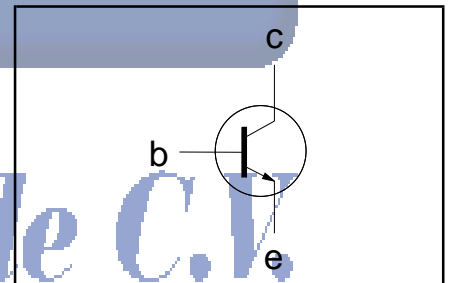
Enhanced performance, new generation, high-voltage, high-speed switching npn transistor in a plastic envelope intended for use in horizontal deflection circuits of colour television receivers and p.c monitors. Features exceptional tolerance to base drive and collector current load variations resulting in a very low worst case dissipation.

**QUICK REFERENCE DATA**

SYMBOL	PARAMETER	CONDITIONS	TYP.	MAX.	UNIT
$V_{CESM}$	Collector-emitter voltage peak value	$V_{BE} = 0$	-	1500	V
$V_{CEO}$	Collector-emitter voltage (open base)		-	800	V
$I_C$	Collector current (DC)		-	16	A
$I_{CM}$	Collector current peak value		-	40	A
$P_{tot}$	Total power dissipation	$T_{mb} \leq 25\text{ }^\circ\text{C}$	-	125	W
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C = 10.0\text{ A}; I_B = 2.5\text{ A}$	-	3.0	V
$I_{Csat}$	Collector saturation current	$f = 32\text{ kHz}$	10	-	A
		$f = 90\text{ kHz}$	8	-	A
$t_f$	Fall time	$I_{Csat} = 10.0\text{ A}; f = 32\text{ kHz}$	t.b.f	t.b.f	$\mu\text{s}$
		$I_{Csat} = 8\text{ A}; f = 90\text{ kHz}$	t.b.f	t.b.f	$\mu\text{s}$

**PINNING - SOT429**

PIN	DESCRIPTION
1	base
2	collector
3	emitter
tab	collector

**PIN CONFIGURATION****SYMBOL****LIMITING VALUES**

Limiting values in accordance with the Absolute Maximum Rating System (IEC 134)

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
$V_{CESM}$	Collector-emitter voltage peak value	$V_{BE} = 0\text{ V}$	-	1500	V
$V_{CEO}$	Collector-emitter voltage (open base)		-	800	V
$I_C$	Collector current (DC)		-	16	A
$I_{CM}$	Collector current peak value		-	40	A
$I_B$	Base current (DC)		-	10	A
$I_{BM}$	Base current peak value		-	15	A
$-I_{BM}$	Reverse base current peak value <sup>1</sup>		-	10	A
$P_{tot}$	Total power dissipation	$T_{mb} \leq 25\text{ }^\circ\text{C}$	-	125	W
$T_{stg}$	Storage temperature		-55	150	$^\circ\text{C}$
$T_j$	Junction temperature		-	150	$^\circ\text{C}$