



NPN BU508DF

SILICON DIFFUSED POWER TRANSISTOR

The BU508DF is a NPN epitaxial-base transistor in TO3PFa package with integrated efficiency diode.
 It is intended for high voltage, high-speed.
 Primarily for use in horizontal deflection circuits of colour television receivers.
 Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
V _{CBO}	Collector-Base Voltage		1500	V
V _{CEO}	Collector-Emitter Voltage		700	V
V _{EBO}	Emitter-Base Voltage		5	V
I _C	Collector Current		8	A
I _{CM}	Collector Current Peak		15	A
I _B	Base Current		4	A
I _{BM}	Base Current Peak		6	A
P _T	Total Dissipation	@ T _{mb} < 25°	34	W
t _J	Junction Temperature		150	°C
t _s	Storage Temperature range		-65 to +150	

THERMAL CHARACTERISTICS

Symbol	Ratings	Conditions	Value		Unit
			Typ.	Max	
R _{thJC}	Junction To Heatsink	Without Heatsink Compound	-	3.7	K/W
	Junction To Heatsink	With Heatsink Compound	-	2.8	
	Junction Ambient	In Free Air	35	-	

NPN BU508DF

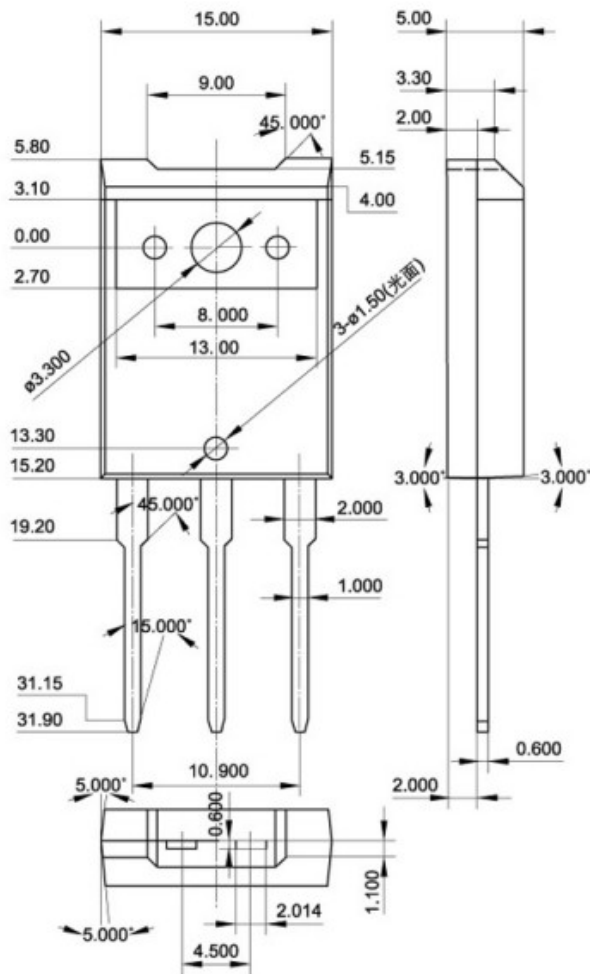
ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

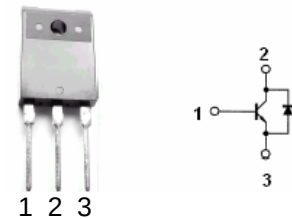
Symbol	Ratings	Test Condition(s)	Min	Typ	Max	Unit
V_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = 100 \text{ mA}$, $I_B = 0$ $L = 25 \text{ mH}$	700	-	-	V
I_{CES}	Collector Cutoff Current	$V_{BE} = 0$, $V_{CE} = 1500 \text{ V}$	-	-	1	mA
		$V_{BE} = 0$, $V_{CE} = 1500 \text{ V}$ $T_j = 125^\circ\text{C}$	-	-	2	
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5 \text{ V}$, $I_C = 0$	-	-	300	mA
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage	$I_C = 4.5 \text{ A}$, $I_B = 1.6 \text{ A}$	-	-	1	V
$V_{BE(SAT)}$	Base-Emitter saturation Voltage	$I_C = 4.5 \text{ A}$, $I_B = 2 \text{ A}$	-	-	1.1	
V_F	Diode Forward voltage	$I_F = 4.5 \text{ A}$	-	1.6	2	V
h_{FE}	DC Current Gain	$I_C = 500 \text{ mA}$, $V_{CE} = 5 \text{ V}$	10	-	30	-
C_{OB}	Output Capacitance	$V_{CB} = 10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$	3	-	-	A
f_T	Transition Frequency	$V_{CE} = 5 \text{ V}$, $I_C = 100 \text{ mA}$	-	7	-	MHz

NPN BU508DF

MECHANICAL DATA CASE TO3PFa



Pin 1 :	Base
Pin 2 :	Collector
Case :	Emitter
Case :	Isolated



Revised October 2012

Information furnished is believed to be accurate and reliable. However, Comset Semiconductors assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. Data are subject to change without notice. Comset Semiconductors makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Comset Semiconductors assume any liability arising out of the application or use of any product and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Comset Semiconductors' products are not authorized for use as critical components in life support devices or systems.



ООО «НИОКРсистемс» - это оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов. Реализуемая нашей компанией продукция насчитывает более полумиллиона наименований.

Благодаря этому наша компания предлагает к поставке практически не ограниченный ассортимент компонентов как оптовыми, мелкооптовыми партиями, так и в розницу.

Благодаря развитой сети поставщиков, помогаем в поиске и приобретении экзотичных или снятых с производства компонентов.

Наша компания это:

- Гарантия качества поставляемой продукции
- Широкий ассортимент
- Минимальные сроки поставок
- Техническая поддержка
- Подбор комплектации
- Индивидуальный подход
- Гибкое ценообразование
- Работаем по 275 ФЗ