


ADL
 奥德利®
 AUDLEY
BU406

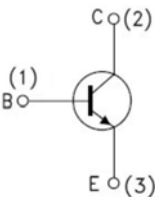
Features:

- High Voltage Capability
- High Switching Speed
- Suitable for Electronic Ballast and Switching Mode Power Supply
- 100% Avalanche Tested


TO-220



1 2 3



(1) B (Base)
 C (2) (Collector)
 E (3) (Emitter)



1. Base (B)
 2. Collector (C)
 3. Emitter (E)

Absolute Maximum Ratings* (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
BV _{CBO}	Collector-Base Voltage	400	V
BV _{CEO}	Collector-Emitter Voltage	200	
BV _{EBO}	Emitter-Base Voltage	6	
I _C	Collector Current	7	A
I _B	Base Current	4	
P _D	Collector Power Dissipation	60	W
T _j , T _{stg}	Junction and Storage Temperature	-55~+150	°C
R _{th(j-c)}	Thermal Resistance Junction to Case	1.03	°C/W

Electrical Characteristics* (Ta=25°C unless otherwise noted)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
BV _{CBO}	Collector-Base Breakdown Voltage	I _C =1mA, I _E =0	400	-	-	V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C =10mA, R _{BE} =∞	200	-	-	
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E =1mA, I _C =0	6	-	-	
I _{CES}	Collector Cut-off Current	V _{CB} =400V, I _E =0	-	-	5	mA
I _{EBO}	Emitter Cut-off Current	V _{EB} =6V, I _C =0	-	-	1	
h _{FE1}	DC Current Gain	V _{CE} =5V, I _C =2A	30	-	125	-
h _{FE2}		V _{CE} =5V, I _C =5A	10	-	-	
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C =5A, I _B =0.5A	-	-	1.0	V
V _{EB(sat)}	Base-Emitter On Voltage	I _C =5A, I _B =0.5A	-	-	1.2	
T _f	Fall Time	V _{CC} =24V, I _C =5A, I _{B1} =-I _{B2} =0.5A	-	-	0.75	μs
f _T	Current Gain Bandwidth Product	V _{CE} =10V, I _C =500mA	10	-	-	MHz

* Pulse Test: Pulse Width=20μs, Duty Cycle≤2%

Typical Characteristics

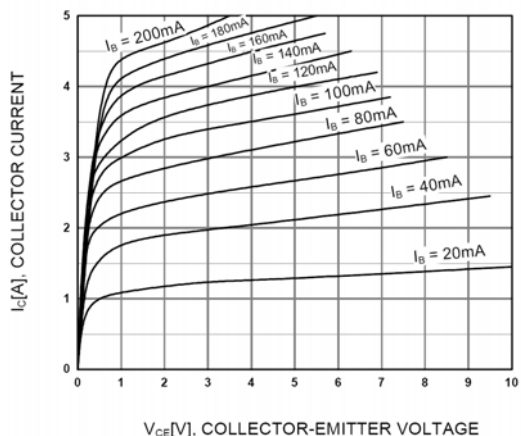


Figure 1. Static Characteristic

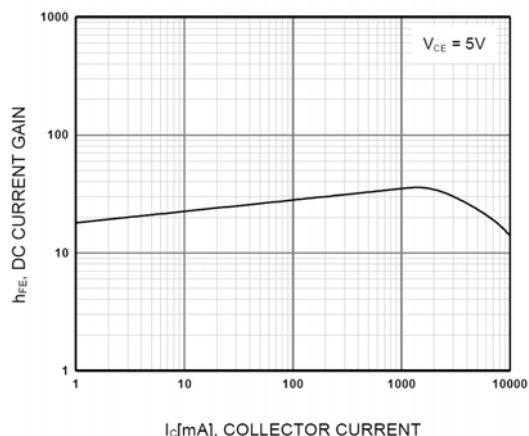


Figure 2. DC current Gain

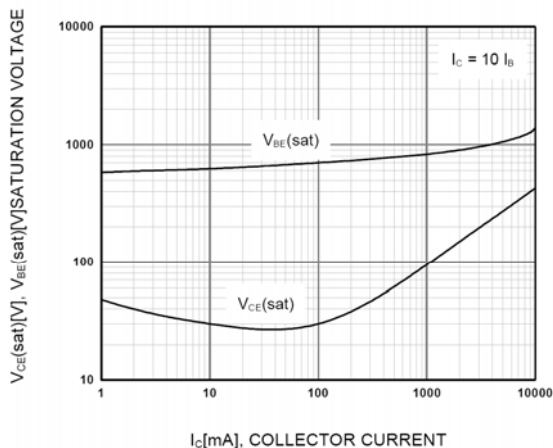


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

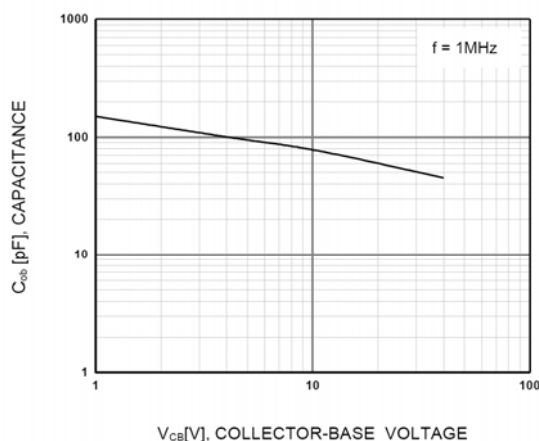


Figure 4. Collector Output Capacitance

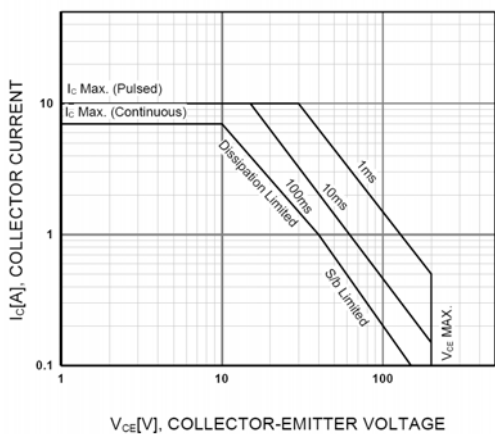


Figure 5. Safe Operating Area

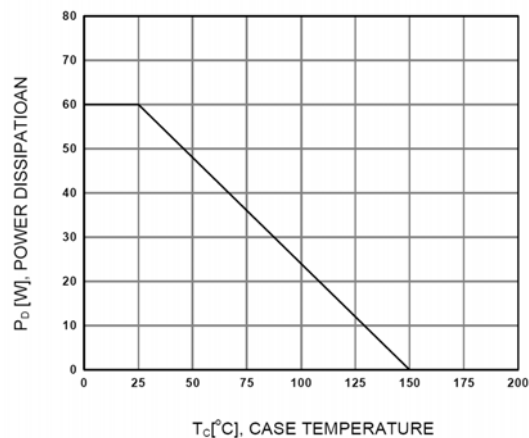
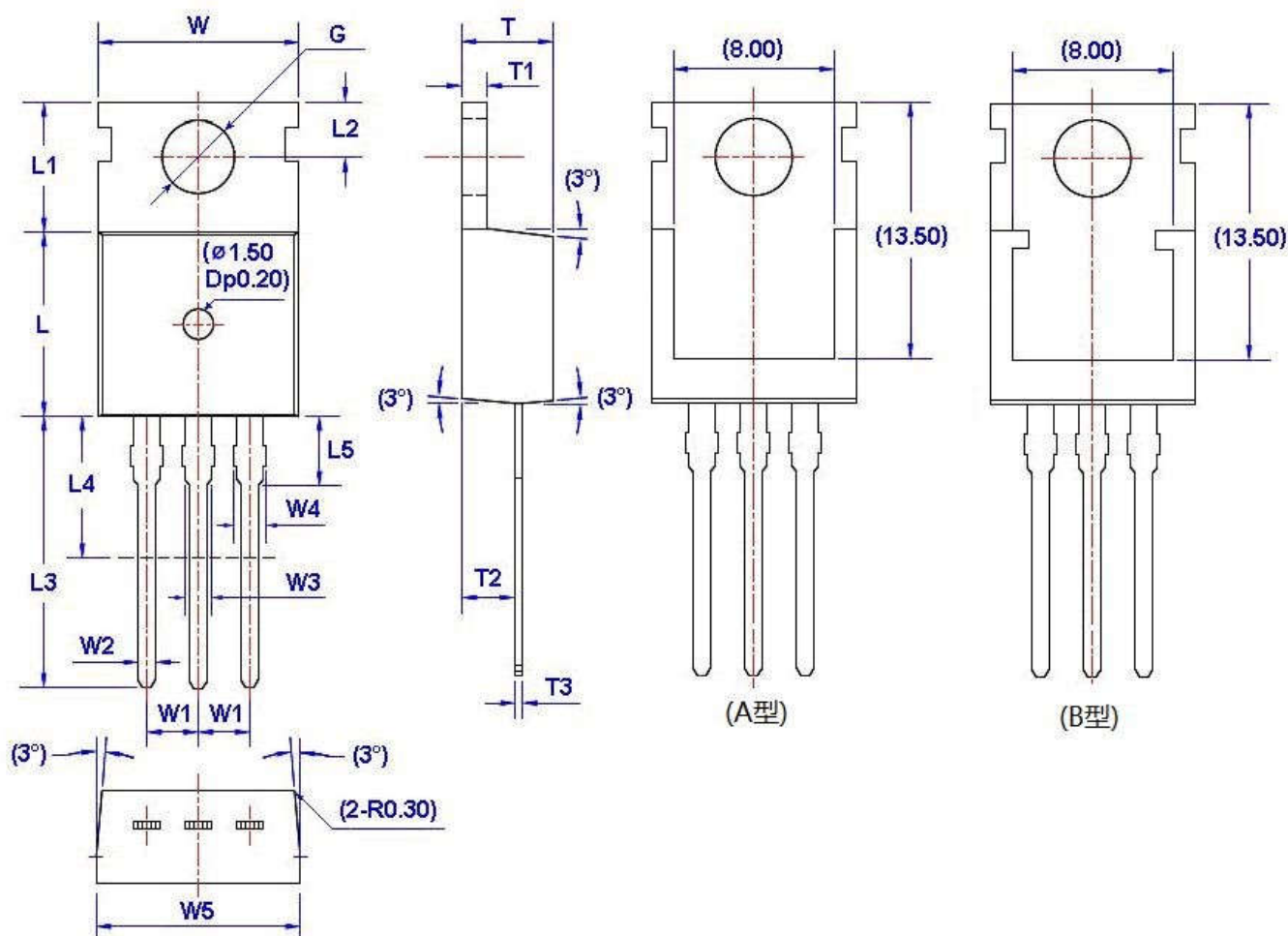


Figure 6. Power Derating

Package Dimension

TO-220



符号	尺寸		符号	尺寸		符号	尺寸		符号	尺寸	
	Min	Max		Min	Max		Min	Max		Min	Max
W	9.66	10.28	W5	9.80	10.20	L4**	6.20	6.60	T3	0.45	0.60
W1	2.54 (TYP)		L	9.00	9.40	L5	2.79	3.30	G(Φ)	3.50	3.70
W2	0.70	0.95	L1	6.40	6.80	T	4.30	4.70			
W3	1.17	1.37	L2	2.70	2.90	T1	1.15	1.40			
W4*	1.32	1.72	L3	12.70	14.27	T2	2.20	2.60			