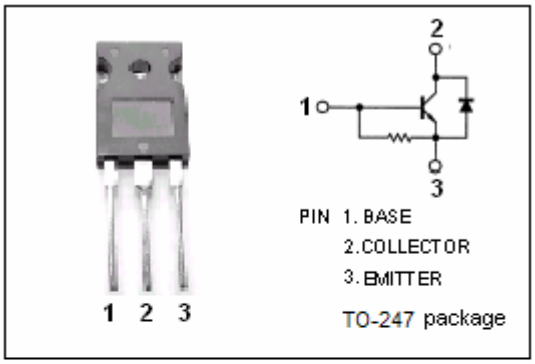
Silicon NPN Power Transistor BU2508DW

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 700V (Min)
- High Switching Speed
- Built-in Damper Diode

APPLICATIONS

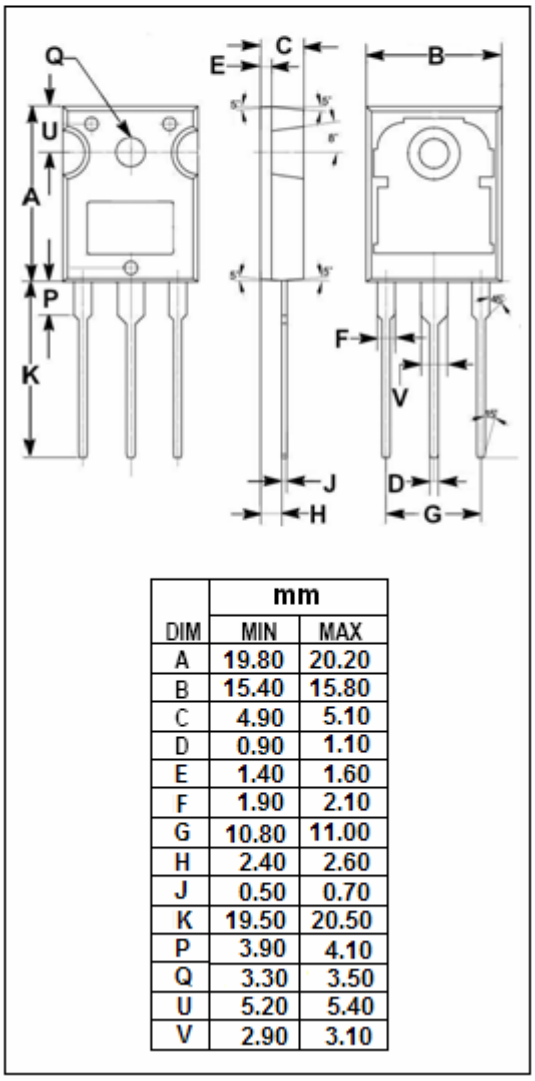
- Designed for use in horizontal deflection circuits of color TV receivers.



ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector- Emitter Voltage(V_{BE}= 0)	1200	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	7.5	V
I_C	Collector Current- Continuous	8	A
I_{CM}	Collector Current-Peak	15	A
I_B	Base Current- Continuous	4	A
I_{BM}	Base Current-Peak	6	A
P_C	Collector Power Dissipation @ T_C=25℃	125	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.0	℃/W



DIM	mm MIN	MAX
A	19.80	20.20
B	15.40	15.80
C	4.90	5.10
D	0.90	1.10
E	1.40	1.60
F	1.90	2.10
G	10.80	11.00
H	2.40	2.60
J	0.50	0.70
K	19.50	20.50
P	3.90	4.10
Q	3.30	3.50
U	5.20	5.40
V	2.90	3.10

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 100mA ; I_B= 0,L= 25mH	700			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 600mA; I_C= 0	7.5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 4.5A; I_B= 1.12A			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 4.5A; I_B= 1.7A			1.1	V
I_{CES}	Collector Cutoff Current	V_{CE}= 1200V ; V_{BE}= 0 V_{CE}= 1200V ; V_{BE}= 0; T_C=125℃			1.0 2.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7.5V ; I_C= 0	140		390	mA
h_{FE-1}	DC Current Gain	I_C= 1A ; V_{CE}= 5V		13		
h_{FE-2}	DC Current Gain	I_C= 4.5A ; V_{CE}= 1V	4		7	
V_{ECF}	C-E Diode Forward Voltage	I_F= 4.5A			2.0	V
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f_{test}= 1MHz		80		pF

Switching times

t_{stg}	Storage Time	I_C= 4.5A , $I_{B(end)}$= 1.1A; L_B= 6 μ H $-V_{BB}$= 4V; ($-dI_B/dt$= 0.6A/ μ s)			6.0	μ s
t_f	Fall Time				0.6	μ s