

isc Silicon NPN Power Transistor

BU2520AW

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 800V$ (Min)
- High Switching Speed

APPLICATIONS

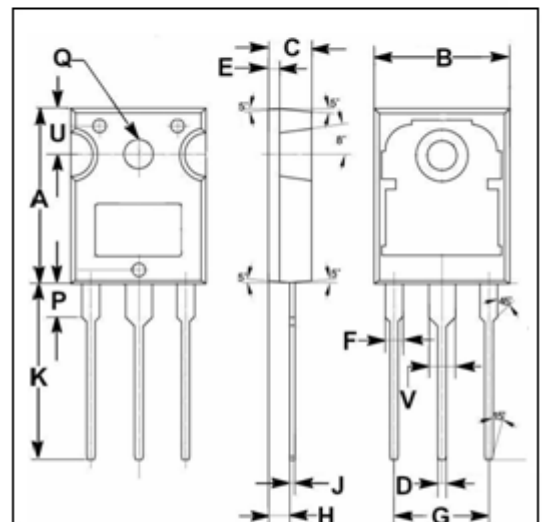
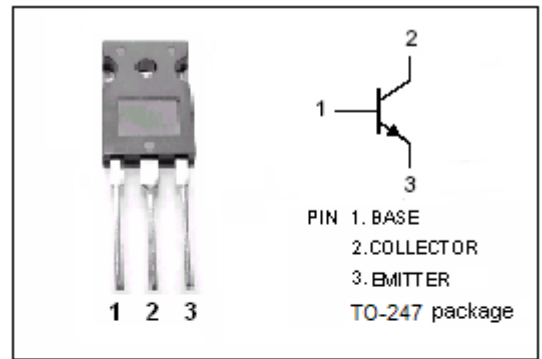
- Designed for use in horizontal deflection circuits of large screen color TV receivers

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector- Emitter Voltage($V_{BE} = 0$)	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7.5	V
I_C	Collector Current- Continuous	10	A
I_{CM}	Collector Current-Peak	25	A
I_B	Base Current- Continuous	6	A
I_{BM}	Base Current-Peak	9	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	125	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$

THERMAL CHARACTERISTICS

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



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°C 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	800			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	7.5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 6A; I _B = 1.2A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 6A; I _B = 1.2A			1.1	V
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V; V _{BE} = 0 V _{CE} = 1500V; V _{BE} = 0; T _C =125°C			1.0 2.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7.5V; I _C = 0			1.0	mA
h _{FE-1}	DC Current Gain	I _C = 0.1A; V _{CE} = 5V		13		
h _{FE-2}	DC Current Gain	I _C = 6A; V _{CE} = 5V	5		9.5	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1MHz		115		pF

Switching times

t _{stg}	Storage Time	I _C = 6A , I _{B(end)} = 1.0A; L _C = 650 μ H; L _B = 5.3 μ H; C _{fb} = 19nF; -V _{BB} = 4V; (-dI _B /dt= 0.8A/ μ s)			5.5	μ s
t _f	Fall Time				0.5	μ s