

**isc Silicon NPN Power Transistor**

**BU2525AW**

**DESCRIPTION**

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

**APPLICATIONS**

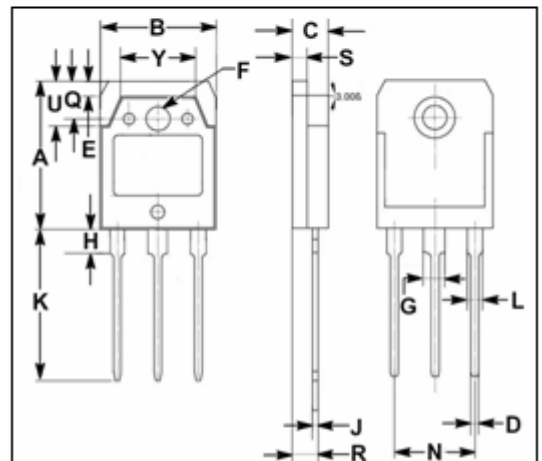
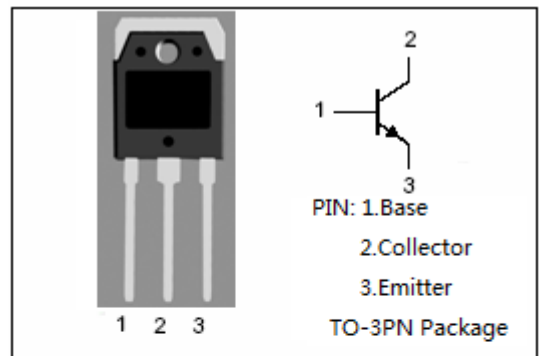
- Designed for use in horizontal deflection circuits of large Screen colour television receivers up to 32 KHz.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CESM}$	Collector- Emitter Voltage Peak value	1500	V
$V_{CEO}$	Collector-Emitter Voltage	800	V
$V_{EBO}$	Emitter-Base Voltage	7.5	V
$I_C$	Collector Current- Continuous	12	A
$I_{CM}$	Collector Current-Peak	30	A
$I_B$	Base Current- Continuous	8	A
$I_{BM}$	Base Current-Peak	12	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	-65~150	$^{\circ}C$

**THERMAL CHARACTERISTICS**

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



DIM	mm	
	MIN	MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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### **ELECTRICAL CHARACTERISTICS**

$T_C=25^\circ\text{C}$  unless otherwise specified

<b>SYMBOL</b>	<b>PARAMETER</b>	<b>CONDITIONS</b>	<b>MIN</b>	<b>TYP.</b>	<b>MAX</b>	<b>UNIT</b>
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 1\text{mA}; I_C= 0$	7.5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 8\text{A}; I_B= 1.6\text{A}$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 8\text{A}; I_B= 1.6\text{A}$			1.3	V
$I_{CES}$	Collector Cutoff Current	$V_{CE}= 1500\text{V}; V_{BE}= 0$ $V_{CE}= 1500\text{V}; V_{BE}= 0; T_C=125^\circ\text{C}$			1.0 2.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 7.5\text{V}; I_C= 0$			1.0	mA
$h_{FE-1}$	DC Current Gain	$I_C= 0.1\text{A}; V_{CE}= 5\text{V}$		13		
$h_{FE-2}$	DC Current Gain	$I_C= 8\text{A}; V_{CE}= 5\text{V}$	5	7	9.5	
$C_{OB}$	Output Capacitance	$I_E= 0; V_{CB}= 10\text{V}; f_{test}= 1\text{MHz}$		145		pF