

SPTECH Silicon NPN Power Transistor

BUH515D

DESCRIPTION

- High Switching Speed
- High Voltage
- Built-in Damper Diode

APPLICATIONS

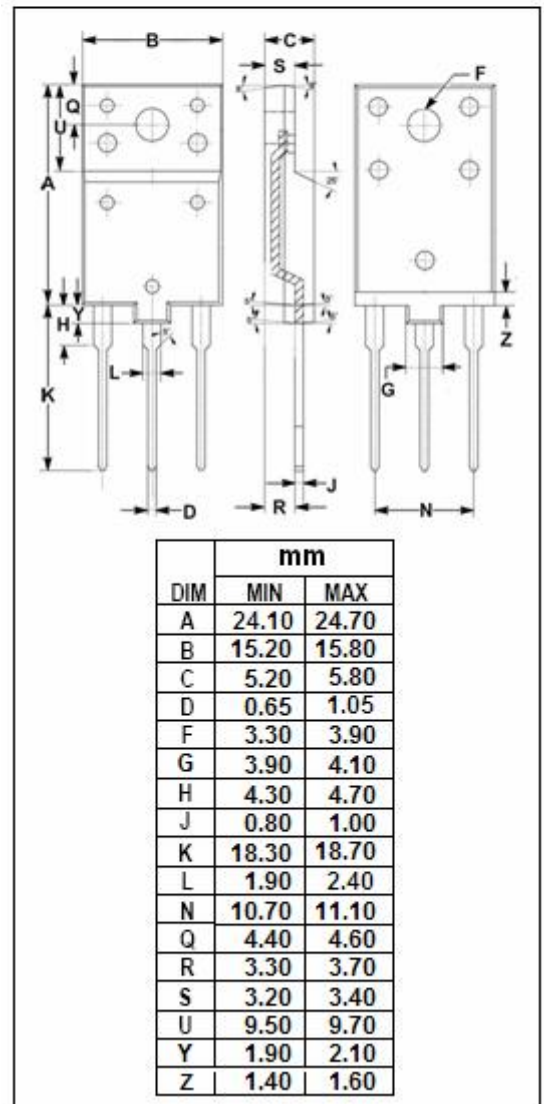
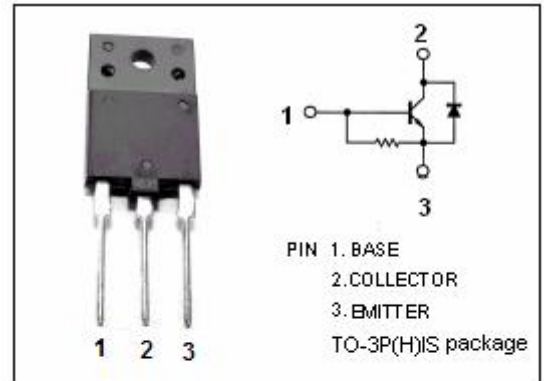
- Designed for use in horizontal deflection circuits in TV's and monitors.

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	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-Continuous	8	A
I _{CM}	Collector Current-Peak	15	A
I _B	Base Current	5	A
I _{BM}	Base Current-Peak	8	A
P _C	Collector Power Dissipation @T _C =25°C	50	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.5	°C/W



ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5A; I_B=1.25A$			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5A; I_B=1.25A$			1.3	V
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5V; I_C=0$			200	mA
I_{CES}	Collector Cutoff Current	$V_{CE}=1300V; V_{BE}=0$ $V_{CE}=1500V; V_{BE}=0$ $V_{CE}=1500V; V_{BE}=0; T_C=125^{\circ}\text{C}$			10 0.2 2.0	μA mA mA
h_{FE}	DC Current Gain	$I_C=5A; V_{CE}=5V$ $I_C=5A; V_{CE}=5V; T_C=100^{\circ}\text{C}$	5 3		10	

Switching Times; Resistive Load

t_s	Storage Time	$I_C=5A; I_{B1}=1.5A; I_{B2}=-2.5A;$ $V_{CC}=400V$			3.6	μs
t_f	Fall Time				0.26	μs