

# **isc Silicon NPN Power Transistor**

# **BUH517**

## **DESCRIPTION**

- · Collector-Emitter Sustaining Voltage-
  - : V<sub>CEO(SUS)</sub>= 700V (Min)
- · High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

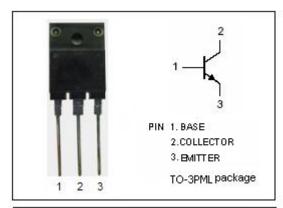
## **APPLICATIONS**

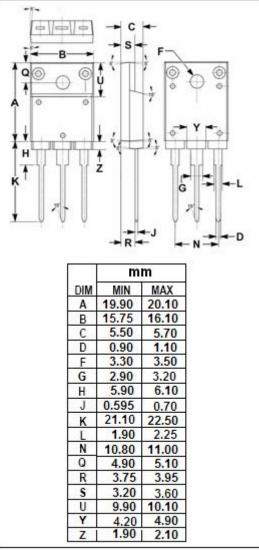
 Designed for use in horizontal deflection circuits of color TV receivers and monitors.



SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>CBO</sub>	Collector-Base Voltage	1700	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	700	V	
$V_{EBO}$	Emitter-Base Voltage	10	V	
Ic	Collector Current- Continuous	8	Α	
Ісм	Collector Current-Peak	15	Α	
lΒ	Base Current- Continuous	5	Α	
I <sub>BM</sub>	Base Current-Peak	8	Α	
Pc	Collector Power Dissipation @ Tc=25°C	60	W	
Тл	Junction Temperature	150	$^{\circ}$	
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C	

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case	2.08	°C/W







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#### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT			
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 50mA ; I <sub>B</sub> = 0	700			V			
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 10mA; I <sub>C</sub> = 0	10			V			
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	Ic= 5A; I <sub>B</sub> = 1.25A			1.5	V			
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 1.25A			1.3	V			
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 1700V V <sub>CE</sub> = 1700V;T <sub>C</sub> =125℃			1.0 2.0	mA			
ІЕВО	Emitter Cutoff Current	V <sub>EB</sub> = 5.0V ; I <sub>C</sub> = 0			0.1	mA			
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 5A ; V <sub>CE</sub> = 5V	6						
Switching Times									
ts	Storage Time	I <sub>C</sub> = 5A;I <sub>B1</sub> =1.25A; I <sub>B2</sub> = 2.5A;			3.9	μs			
t <sub>f</sub>	Fall Time	10- 0m,181-1.20m, 182-2.0m,			0.28	μ \$			

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