

# **isc** Silicon NPN Power Transistor

**BU800** 

#### **DESCRIPTION**

- · High Breakdown Voltage-
- : V<sub>CBO</sub>= 1500V (Min)
- · Collector-Emitter Saturation Voltage-
  - : V<sub>CE(sat)</sub>= 5.0V(Max.)@ I<sub>C</sub>= 5.0A
- · Built-in Damper Diode
- · Wide area of safe operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

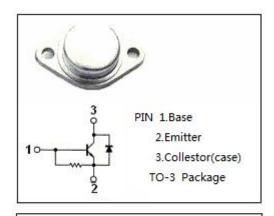


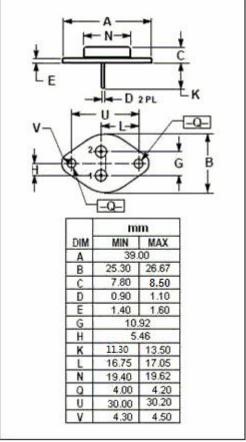
#### **APPLICATIONS**

• Designed for horizontal deflection output applications.

## ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
Vces	Collector- Emitter Voltage(V <sub>BE</sub> = 0)	1500	٧
$V_{\sf CEO}$	Collector-Emitter Voltage	700	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current- Continuous	5	Α
I <sub>CP</sub>	Collector Current- Peak	8	Α
Pc	Collector Power Dissipation @ T <sub>C</sub> = 25 °C	50	W
TJ	Junction Temperature	150	$^{\circ}$
T <sub>stg</sub>	Storage Temperature Range	-65~150	${\mathbb C}$







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#### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 500mA; I <sub>C</sub> = 0	5			V	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5.0A; I <sub>B</sub> = 1.0A			5.0	V	
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 5.0A; I <sub>B</sub> = 1.0A			1.5	V	
I <sub>CBO</sub>	Collector Base Cutoff Current	V <sub>CB</sub> =750V; I <sub>E</sub> = 0			50	uA	
		V <sub>CB</sub> =1500V; I <sub>E</sub> = 0			1	mA	
h <sub>FE -1</sub>	DC Current Gain	I <sub>C</sub> = 0.1A; V <sub>CE</sub> = 5V	6		30		
h <sub>FE -2</sub>	DC Current Gain	I <sub>C</sub> = 5A; V <sub>CE</sub> = 5V	2.25				
V <sub>ECF</sub>	C-E Diode Forward Voltage	I <sub>F</sub> = 5A			2.5	V	
Switching Times							

t <sub>stg</sub>	Storage Time	- I <sub>C</sub> = 5A,I <sub>B1</sub> = I <sub>B2</sub> = 1A		12	μS
t <sub>f</sub>	Fall Time	IC - 3A,IB1 - IB2- IA		0.7	μ <b>s</b>

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