

### **INCHANGE SEMICONDUCTOR**

### **isc** Silicon NPN Power Transistor

# 2SC4746

### DESCRIPTION

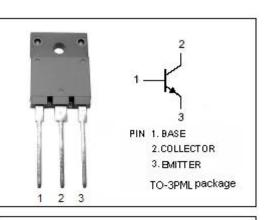
- · High Breakdown Voltage-
- : V<sub>CBO</sub>= 1500V (Min)
- · High Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

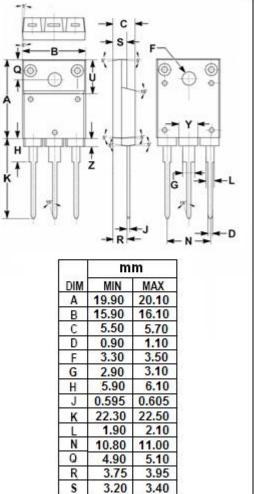
#### **APPLICATIONS**

· Designed for character display horizontal deflection output stage applications

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)						
SYMBOL	PARAMETER	VALUE	UNIT			
V <sub>CBO</sub>	Collector-Base Voltage	1500	V			
V <sub>CEO</sub>	Collector-Emitter Voltage	800	V			
V <sub>EBO</sub>	Emitter-Base Voltage	6	V			
lc	Collector Current- Continuous	8	A			
I <sub>C(surge)</sub>	Collector Current-Surge	20	A			
Pc	Collector Power Dissipation @ T <sub>c</sub> =25°C	50	W			
TJ	Junction Temperature	150	°C			
Tstg	Storage Temperature Range	-55~150	°C			

1





3.40

10.10

4.90

2.10

9.90

4.70

1.90

U

Y

Ζ



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### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	Ic= 10mA ; R <sub>BE</sub> = ∞	800			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 10mA ; I <sub>C</sub> = 0	6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 7Α; I <sub>B</sub> = 1.4Α			5.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 7Α; I <sub>B</sub> = 1.4Α			1.5	V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 1500V ; R <sub>BE</sub> = 0			500	μA
h <sub>FE</sub>	DC Current Gain	Ic= 1A ; V <sub>CE</sub> = 5V	8		38	
tf	Fall Time	I <sub>CP</sub> = 7A , I <sub>B1</sub> = 1.4A			0.5	μ <b>S</b>

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