

**isc Silicon NPN Power Transistor**
**2SC4744**
**DESCRIPTION**

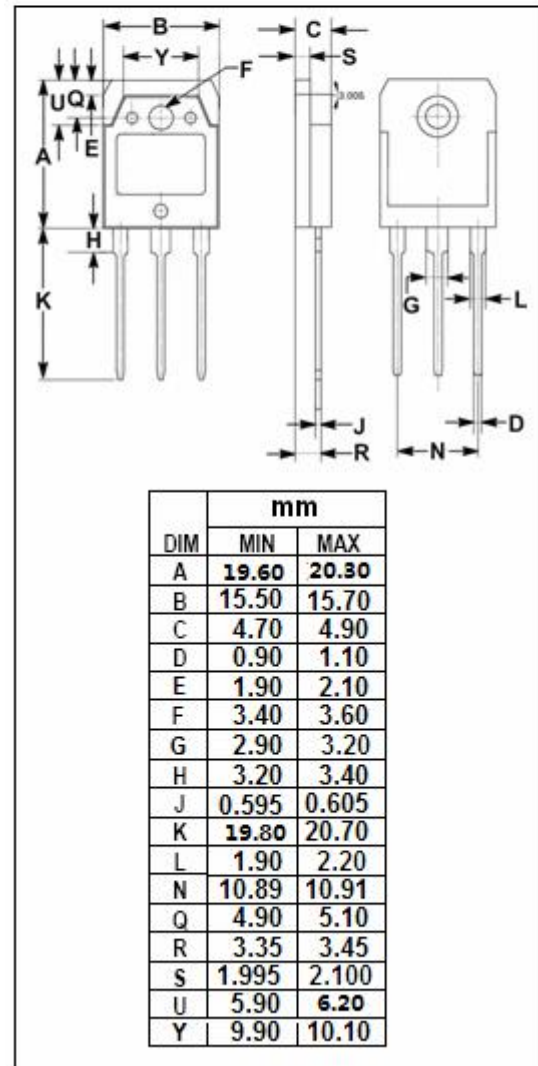
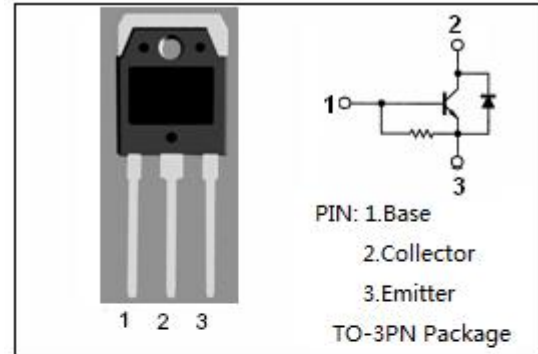
- High Breakdown Voltage-  
:  $V_{CBO} = 1500V$  (Min)
- High Switching Speed
- Built-in Damper Diode
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for character display horizontal deflection output stage applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CES}$	Collector-Emitter Voltage	1500	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_{C(peak)}$	Collector Current-Peak	7	A
$I_{C(surge)}$	Collector Current-Surge	16	A
$I_D$	C-E Diode Forward Current	7	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ C$	50	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



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**ELECTRICAL CHARACTERISTICS**

 T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 400mA ; I <sub>C</sub> = 0	6			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 1.25A			2.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 1.25A			1.5	V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 1500V ; R <sub>BE</sub> = 0			500	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 1A ; V <sub>CE</sub> = 5V			25	
V <sub>ECF</sub>	C-E Diode Forward Voltage	I <sub>F</sub> = 6A			2.0	V
t <sub>f</sub>	Fall Time	I <sub>CP</sub> = 5A , I <sub>B1</sub> = 1A; I <sub>B2</sub> = -2A			0.4	μ s

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