

# **isc** Silicon NPN Power Transistor

# 2SD1497

### DESCRIPTION

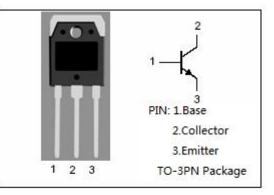
- High Breakdown Voltage-
- : V<sub>CBO</sub>= 1500V (Min)
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

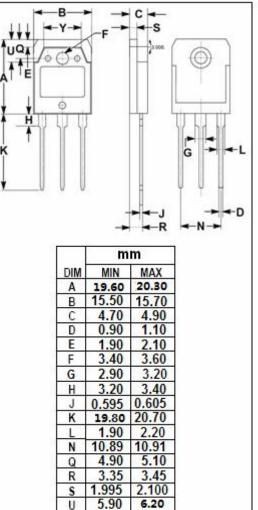
#### APPLICATIONS

• Designed for TV horizontal deflection output applications.

SYMBOL	PARAMETER	VALUE	UNIT	
V <sub>сво</sub>	Collector-Base Voltage	1500	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	600	V	
Vebo	Emitter-Base Voltage	7	V	
I <sub>C</sub>	Collector Current-Continuous	6	А	
I <sub>C(surge)</sub>	Collector Current-Surge	16	А	
Pc	Collector Power Dissipation @ $T_C$ = 25°C	50	W	
TJ	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range	-45~150	°C	

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)





9.90 10.10

## isc website: <u>www.iscsemi.com</u>

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# ELECTRICAL CHARACTERISTICS

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	$I_{c}$ = 10mA; $R_{BE}$ = $\infty$	600			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	7			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5Α; I <sub>B</sub> = 1Α			5.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 5Α; I <sub>B</sub> = 1Α			1.5	V
I <sub>CEX</sub>	Collector Cutoff Current	V <sub>CB</sub> = 1500V; V <sub>EB</sub> = 2V			1.0	mA
t <sub>f</sub>	Fall Time	I <sub>CP</sub> = 4A, I <sub>B1</sub> = 1.3A			2.0	μ <b>S</b>
h <sub>FE-</sub>	DC Current Gain	I <sub>C</sub> = 5A ; V <sub>CE</sub> = 5V	5			



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