

## Silicon NPN Power Transistors

## 2SD1497

## DESCRIPTION

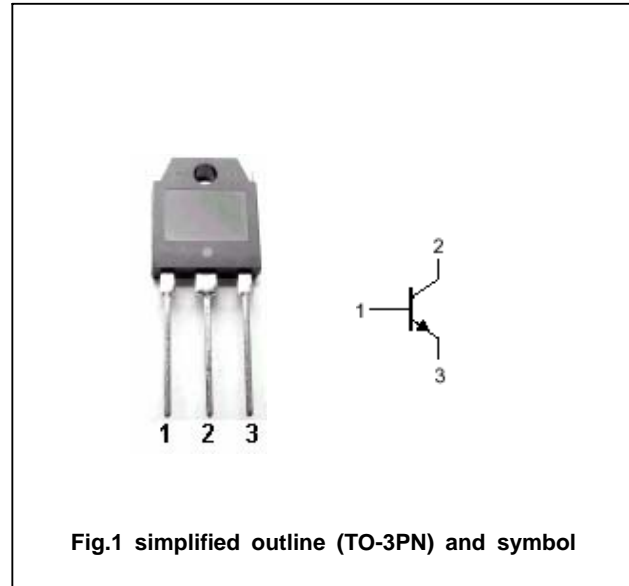
- With TO-3PN package
- High voltage ,high reliability
- Wide area of safe operation

## APPLICATIONS

- High voltage power switching TV horizontal deflection output applications

## PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter



## Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	1500	V
$V_{CEO}$	Collector-emitter voltage	Open base	600	V
$V_{EBO}$	Emitter-base voltage	Open collector	7	V
$I_C$	Collector current		6	A
$I_{CM}$	Collector current-peak		7	A
$I_{C(surge)}$	Collector surge current		16	A
$P_C$	Collector power dissipation	$T_C=25^{\circ}C$	50	W
$T_j$	Junction temperature		150	$^{\circ}C$
$T_{stg}$	Storage temperature		-45~150	$^{\circ}C$

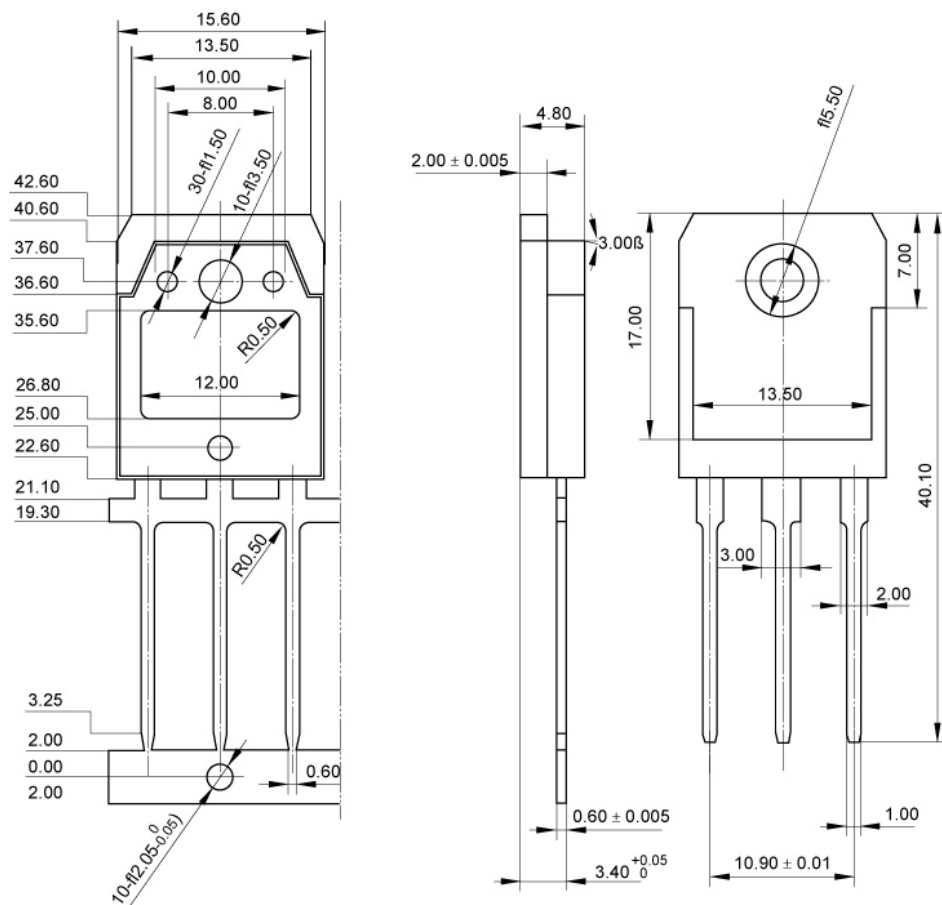
**Silicon NPN Power Transistors****2SD1497****CHARACTERISTICS****T<sub>j</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10mA$ ; $I_C=0$	7			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=10mA$ ; $R_{BE}=\infty$	600			V
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=5A$ ; $I_B=1A$			5.0	V
$V_{BEsat}$	Base-emitter saturation voltage	$I_C=5A$ ; $I_B=1A$			1.5	V
$I_{CEX}$	Collector cut-off current	$V_{CE}=1500V$ ; $V_{BE}=1.5V$			1.0	mA
$I_{EBO}$	Emitter cut-off current	$V_{EB}=7V$ ; $I_C=0$			1.0	mA
$h_{FE-1}$	DC current gain	$I_C=0.3A$ ; $V_{CE}=5V$	10		30	
$h_{FE-2}$	DC current gain	$I_C=5A$ ; $V_{CE}=5V$	5			
$t_f$	Fall time	$I_{CP}=4A$ ; $I_{B1}=1.3A$ ; $L_B=0$			2.0	$\mu s$

## Silicon NPN Power Transistors

**2SD1497**

## PACKAGE OUTLINE



**Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.10$  mm)**