

Silicon NPN Power Transistors

2SD1431

DESCRIPTION

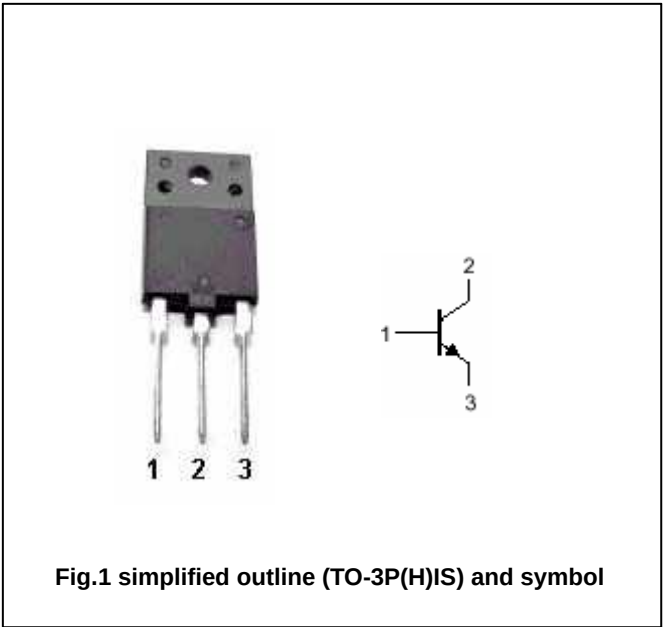
- With TO-3P(H)IS package
- High voltage ,high speed
- Low collector saturation voltage

APPLICATIONS

- Designed for use in color TV and CRT display horizontal output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings (T_a=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	5	V
I _C	Collector current		5	A
P _D	Total power dissipation	T _C =25℃	80	W
T _j	Junction temperature		150	℃
T _{stg}	Storage temperature		-55~150	℃

Silicon NPN Power Transistors

2SD1431

CHARACTERISTICS

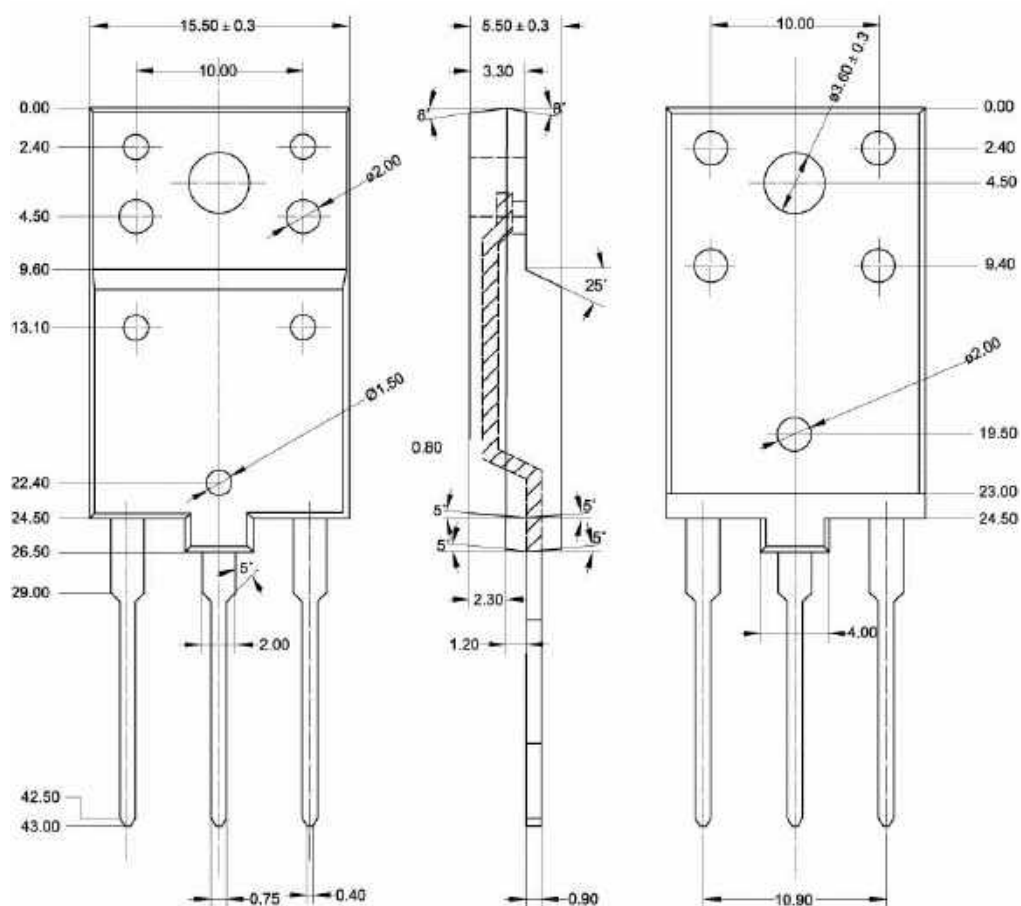
Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=4A$; $I_B=0.8A$			5.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C=4A$; $I_B=0.8A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=500V$; $I_E=0$			10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$			1	mA
h_{FE}	DC current gain	$I_C=1A$; $V_{CE}=5V$	8			
f_T	Transition frequency	$I_C=0.1A$; $V_{CE}=10V$		3		MHz
C_{OB}	Output capacitance	$I_E=0$; $V_{CB}=10V$; $f=1.0MHz$		165		pF
t_f	Fall time	$I_C=4A$; $I_{B1}=0.8A$			1.0	μs

Silicon NPN Power Transistors

2SD1431

PACKAGE OUTLINE

Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)