

Silicon NPN Power Transistors

2SD1428

DESCRIPTION

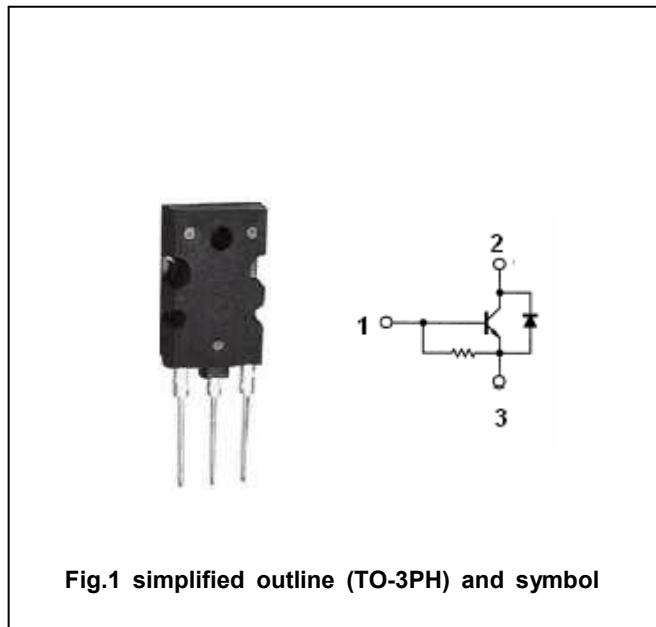
- With TO-3PH package
- Built-in damper diode
- High voltage ,high speed
- Low collector saturation voltage

APPLICATIONS

- Designed for use in color TV horizontal output applications

PINNING

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

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

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		6	A
I_E	Emitter current		-6	A
P_D	Total power dissipation	$T_C=25^\circ\text{C}$	80	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=200mA$; $I_C=0$	5			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_{CBO}	Collector cut-off current	$V_{CB}=500V$; $I_E=0$			10	μA
h_{FE}	DC current gain	$I_C=1A$; $V_{CE}=5V$	8			
f_T	Transition frequency	$I_C=0.1A$; $V_{CE}=10V$; $f=1MHz$		3		MHz
C_{OB}	Output capacitance	$I_E=0$; $V_{CB}=10V$; $f=1MHz$		165		pF
V_F	Diode forward voltage	$I_F=6A$			2.0	V
t_f	Fall time	$I_C=5A$; $I_{B1}=1A$			1.0	μs

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PACKAGE OUTLINE

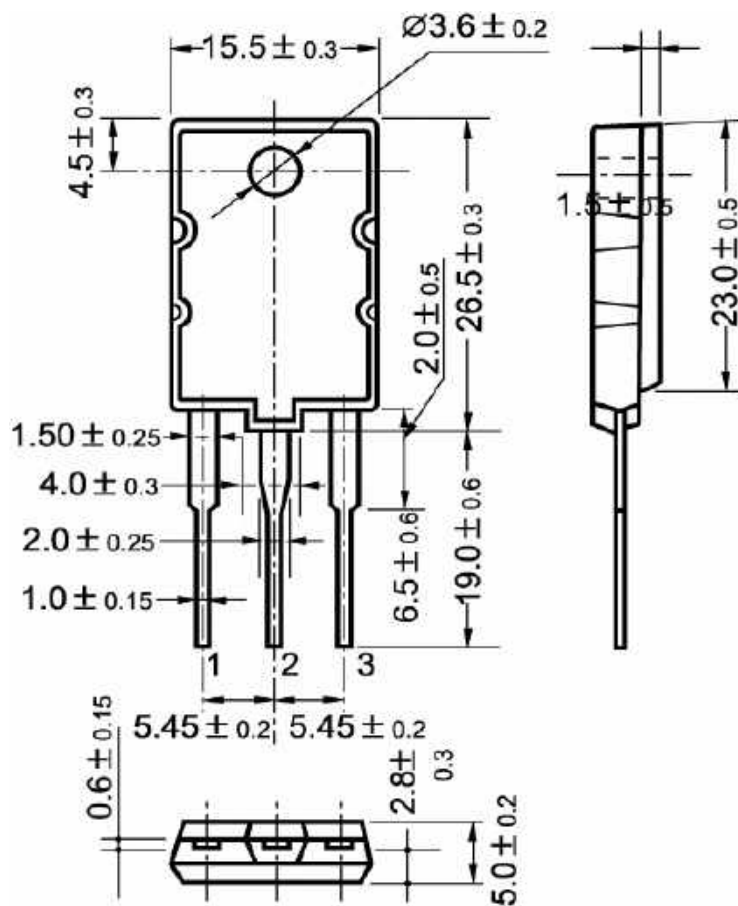


Fig.2 outline dimensions