Silicon NPN Power Transistors 2SD1428

DESCRIPTION

- With TO-3P(H)1S package
- Built-in damper diode
- High voltage ,high speed
- Low collector saturation voltage

APPLICATIONS

- Designed for use in color TV horizontal output applications

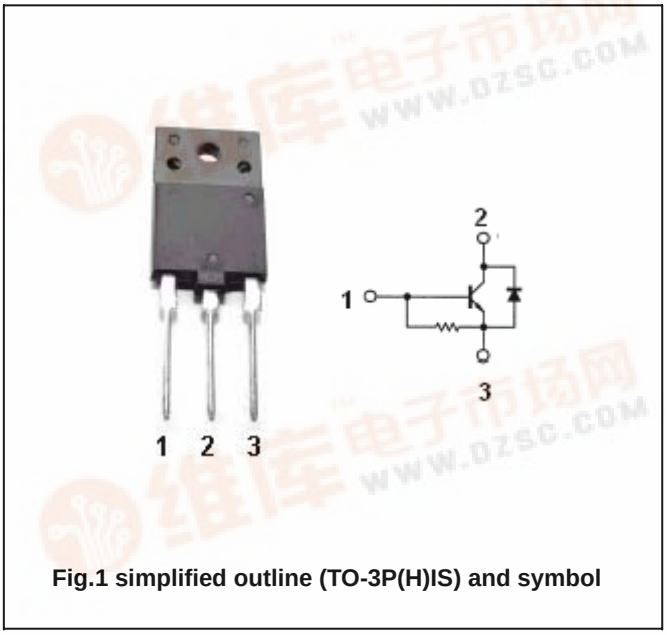

Fig.1 simplified outline (TO-3P(H)IS) and symbol

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
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	5	V
I_C	Collector current		6	A
I_E	Emitter current		-6	A
P_D	Total power dissipation	T_C=25℃	80	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25℃ 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
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=5A; I_B=1A			5.0	V
$V_{BE(sat)}$	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 freuqency	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

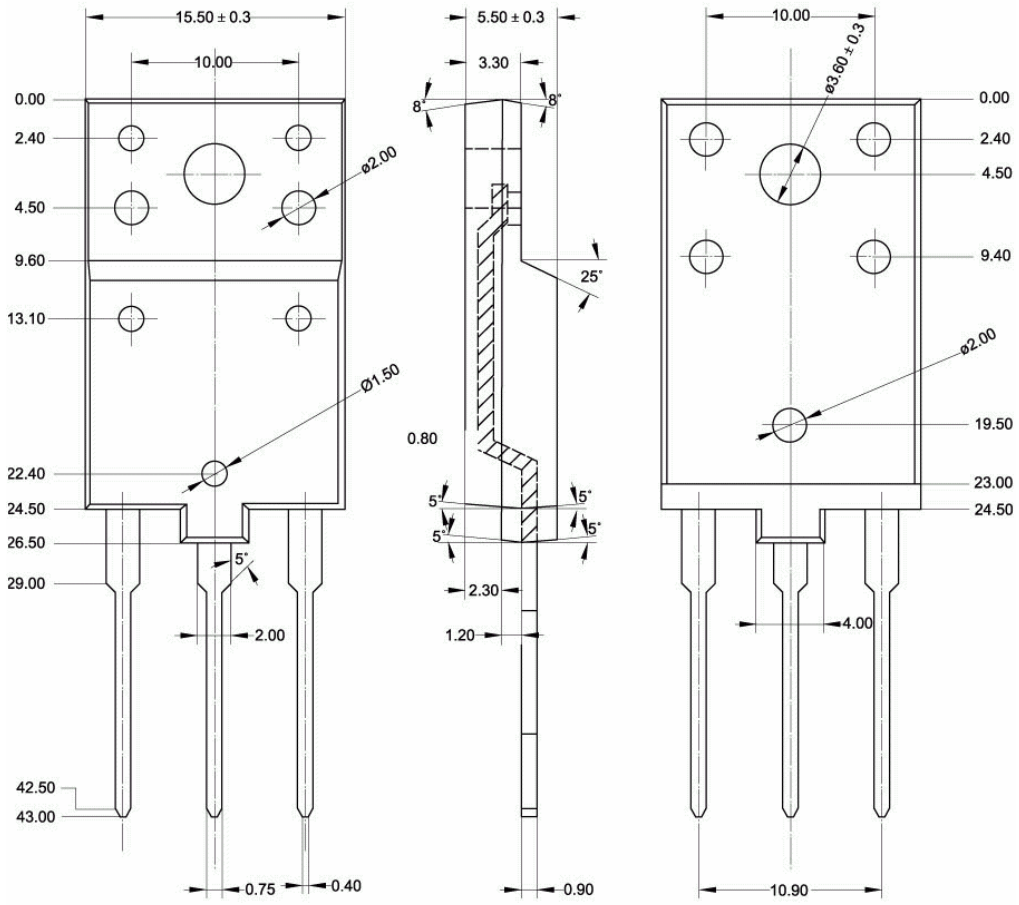

Fig.2 outline dimensions (unindicated tolerance:±0.15 mm)