Silicon NPN Power Transistors 2SD2148

DESCRIPTION

- With TO-3PML package
- High voltage ,high speed
- Low collector saturation voltage

APPLICATIONS

- High speed switching power supply output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

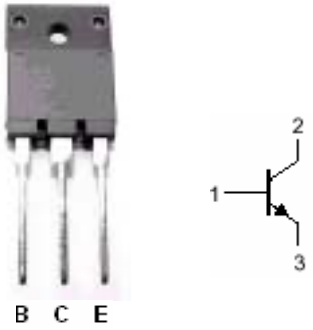

Fig.1 simplified outline (TO-3PML) and symbol

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	700	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		8	A
I_{CM}	Collector current-peak		16	A
I_B	Base current		4	A
P_C	Collector power dissipation	T_C=25℃	50	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
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=5mA , I_B=0	700			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=1mA , I_C=0	5			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=7A ;I_B=1.4A			5.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=7A ;I_B=1.4A			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=800V; I_E=0			10	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			10	μA
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=5V	8			
h_{FE-2}	DC current gain	I_C=7A ; V_{CE}=5V	4			

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PACKAGE OUTLINE

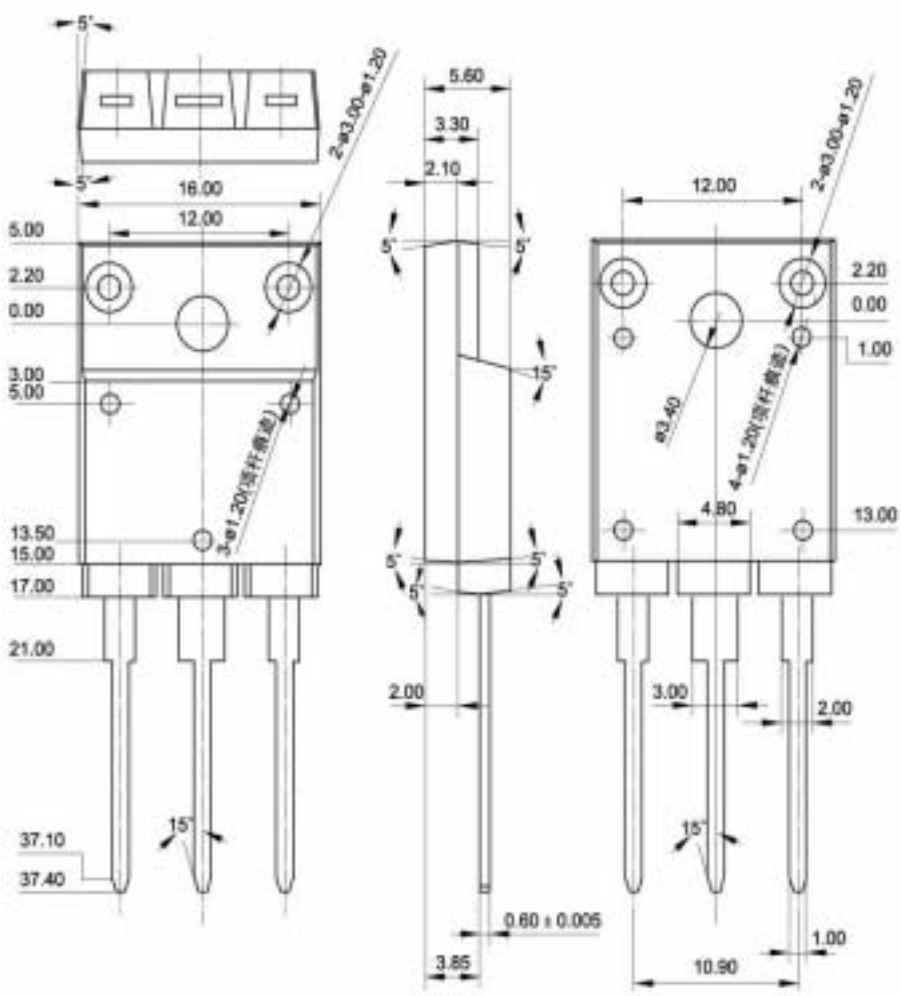

Fig.2 outline dimensions(unindicated tolerance:±0.10 mm)