Silicon NPN Power Transistors 2SD1446

DESCRIPTION

·With TO-220Fa package
·High DC current gain
·High collector to base voltage V_{CBO}
·DARLINGTON

APPLICATIONS

·For power amplification

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

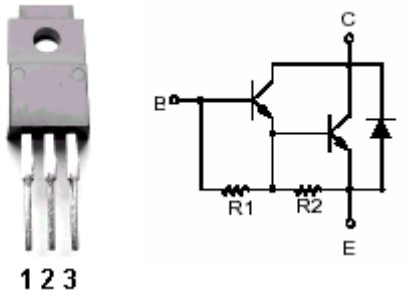

Fig.1 simplified outline (TO-220Fa) and symbol

Absolute maximum ratings(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector -emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		6	A
I_{CP}	Collector current peak		10	A
P_C	Collector power dissipation	T_C=25□	40	W
		T_a=25□	2.0	
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=0.1A; I_C=0	5			V
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=2A; L=10mH	400			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=3A ;I_B=0.06A			1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=3A ;I_B=0.06A			2.5	V
I_{CBO}	Collector cut-off current	V_{CB}=350V; I_E=0			100	μA
h_{FE}	DC current gain	I_C=2A ; V_{CE}=2V	500			
f_T	Transition frequency	I_C=1A ; V_{CE}=10V;		15		MHz

PACKAGE OUTLINE

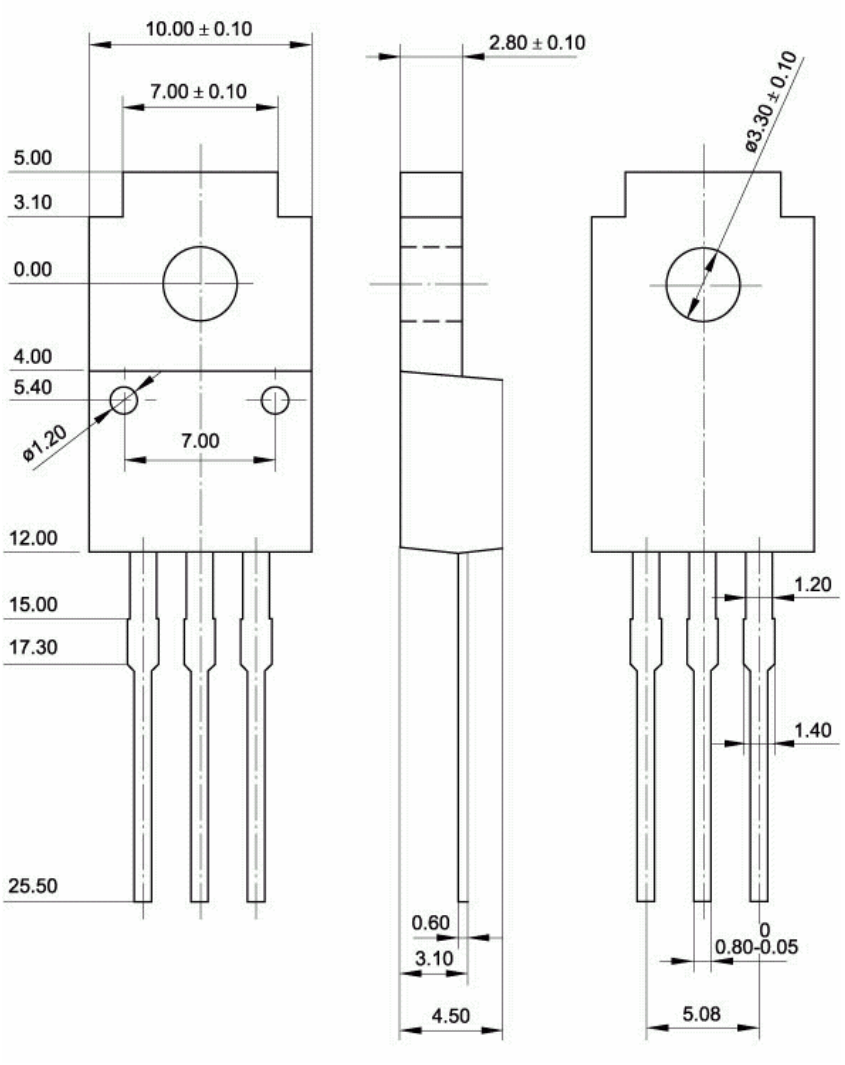

Fig.2 Outline dimensions (unindicated tolerance: ±0.15 mm)