Silicon NPN Power Transistors 2SD1026

DESCRIPTION

·With TO-3PN package
·High DC current gain
·DARLINGTON

PINNING

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

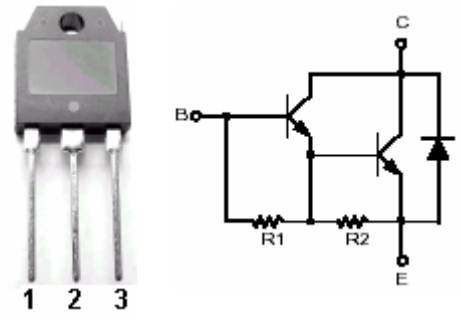


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	100	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current-Continuous		15	A
I_{CM}	Collector current-Peak		22	A
I_B	Base current		1	A
I_{BM}	Base current-Peak		2	A
P_T	Total power dissipation	T_C=25□	100	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	1.25	□/W

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEsat}	Collector-emitter saturation voltage	I_C=10A; I_B=20mA			1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=10A; I_B=20mA			2.0	V
I_{CEO}	Collector cut-off current	V_{CE}=100V; I_B=0			0.1	mA
I_{CBO}	Collector cut-off current	V_{CB}=100V; I_E=0			0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=7V; I_C=0			5	mA
h_{FE}	DC current gain	I_C=10A ; V_{CE}=3V	1500		30000	
f_T	Transition frequency	I_C=1.5A ; V_{CE}=10V		20		MHz
t_{on}	Turn-on time	I_C=15A; I_{B1}=I_{B2}=20mA R_L=2Ω;V_{BB2}=4V			2	μs
t_s	Storage time				5	μs
t_f	Fall time				3	μs

PACKAGE OUTLINE

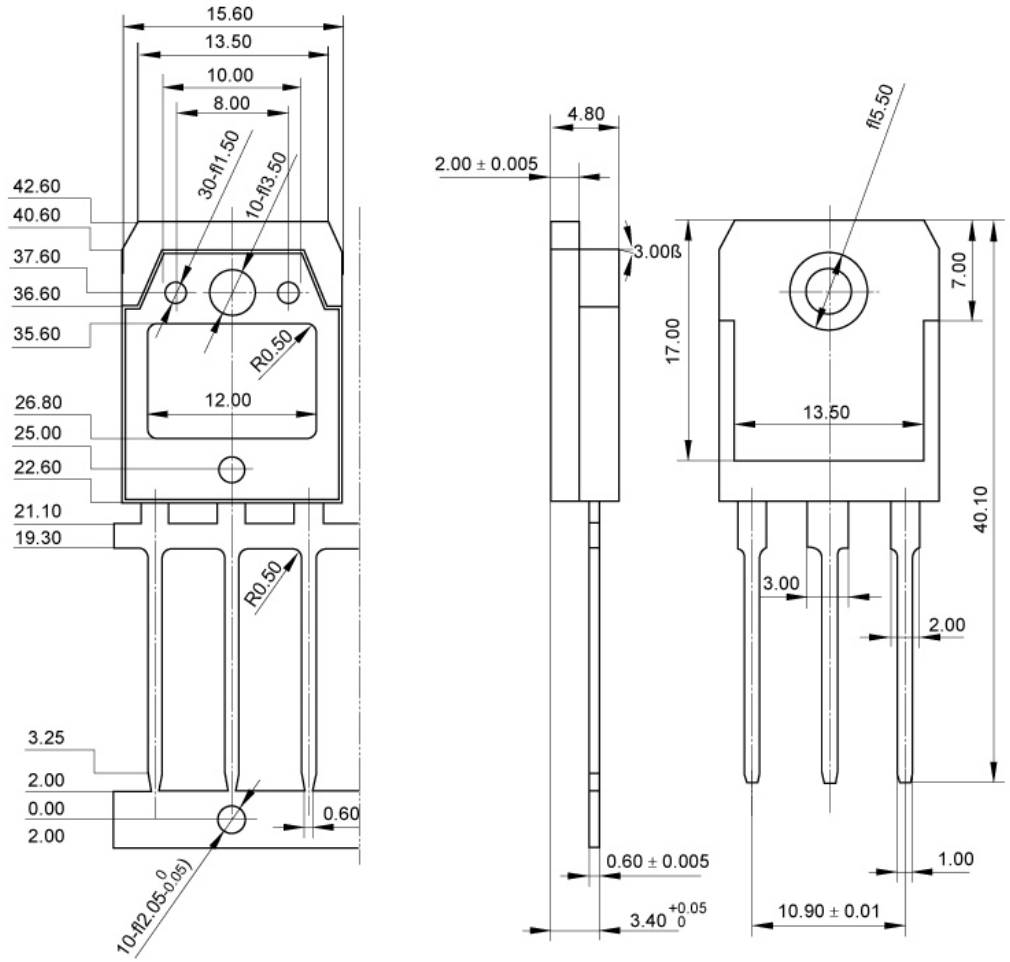


Fig.2 Outline dimensions