Silicon NPN Power Transistors 2SD2082

DESCRIPTION

·With TO-3PML package
·DARLINGTON
·Complement to type 2SB1382

APPLICATIONS

·Driver for Solenoid, Motor and General Purpose

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

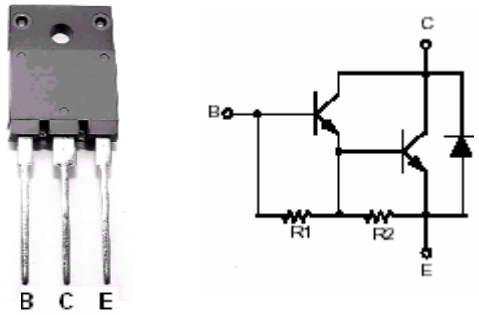

Fig.1 simplified outline (TO-3PML) and symbol

Absolute maximum ratings(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	120	V
V_{CEO}	Collector-emitter voltage	Open base	120	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		16	A
I_{CM}	Collector current-peak		26	A
I_B	Base current		1	A
P_C	Collector power dissipation	T_C=25□	75	W
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_{CEsat}	Collector-emitter saturation voltage	I_C=8A;I_B=16m A			1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=8A;I_B=16m A			2.5	V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA;I_B=0	120			V
I_{EBO}	Emitter cut-off current	V_{EB}=6V; I_C=0			10	mA
I_{CBO}	Collector cut-off current	V_{CB}=120V; I_E=0			10	μA
h_{FE}	DC current gain	I_C=8 A ; V_{CE}=4V	2000			
f_T	Transition frequency	I_C=1 A ; V_{CE}=12V		20		MHz
C_{OB}	Output capacitance	I_E=0 ; V_{CB}=10V;f=1MHz		210		pF
Switching times						
t_{on}	Turn-on time	I_C=8A ;I_{B1}=-I_{B2}=16mA V_{CC}=40V ,R_L=5Ω		0.6		μs
t_s	Storage time			7.0		μs
t_f	Fall time			1.5		μs

PACKAGE OUTLINE

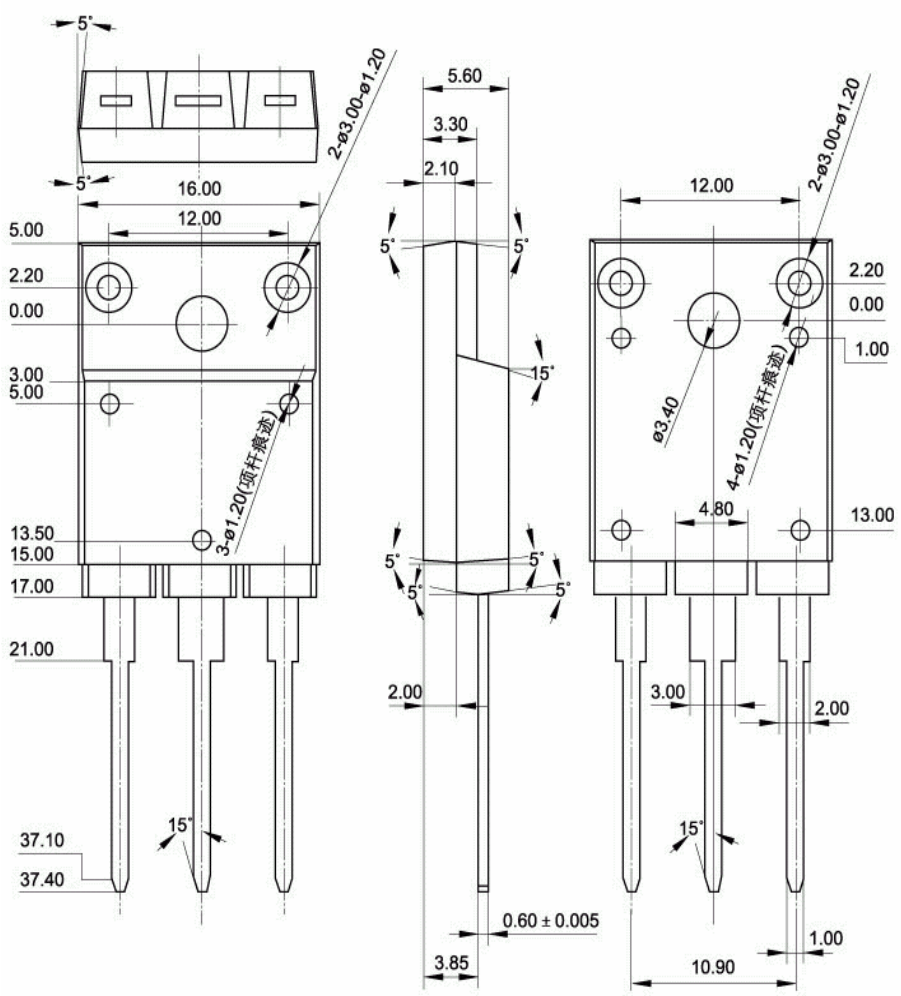

Fig.2 Outline dimensions