Silicon NPN Power Transistors BU941ZPFI

DESCRIPTION

·With TO-3PML package
·DARLINGTON
·High breakdown voltage

APPLICATIONS

·High ruggedness electronic ignitions

PINNING

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

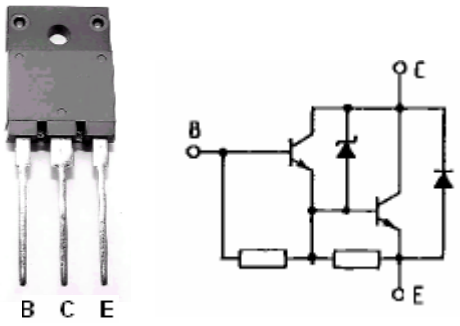

Fig.1 simplified outline (TO-3PML) and symbol

Absolute maximum ratings (Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CEO}	Collector-emitter voltage	Open base	350	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		15	A
I_{CM}	Collector current-peak		30	A
I_B	Base current		1	A
I_{BM}	Base current-peak		5	A
P_T	Total power dissipation	T_C=25□	65	W
T_j	Max.operating junction temperature		175	□
T_{stg}	Storage temperature		-65~175	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}case}$	Thermal resistance junction case	2.3	□/W

CHARACT ERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CL}	Clamping voltage	I_C=0.1 A ;I_B=0	350		500	V
$V_{CE(sat-1)}$	Collector-emitter saturation voltage	I_C=8A; I_B=100m A			1.8	V
$V_{CE(sat-2)}$	Collector-emitter saturation voltage	I_C=10A; I_B=250m A			1.8	V
$V_{CE(sat-3)}$	Collector-emitter saturation voltage	I_C=12A; I_B=300m A			2.0	V
$V_{BE(sat-1)}$	Base-emitter saturation voltage	I_C=8A; I_B=100m A			2.2	V
$V_{BE(sat-2)}$	Base-emitter saturation voltage	I_C=10A; I_B=250m A			2.5	V
$V_{BE(sat-3)}$	Base-emitter saturation voltage	I_C=12A; I_B=300m A			2.7	V
I_{CEO}	Collector cut-off current	V_{CE}=300V; I_B=0 T_C=125□			0.1 0.5	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			20	mA
h_{FE}	DC current gain	I_C=5A ; V_{CE}=10V	300			
V_F	Diode forward voltage	I_F=10A			2.5	V

PACKAGE OUTLINE

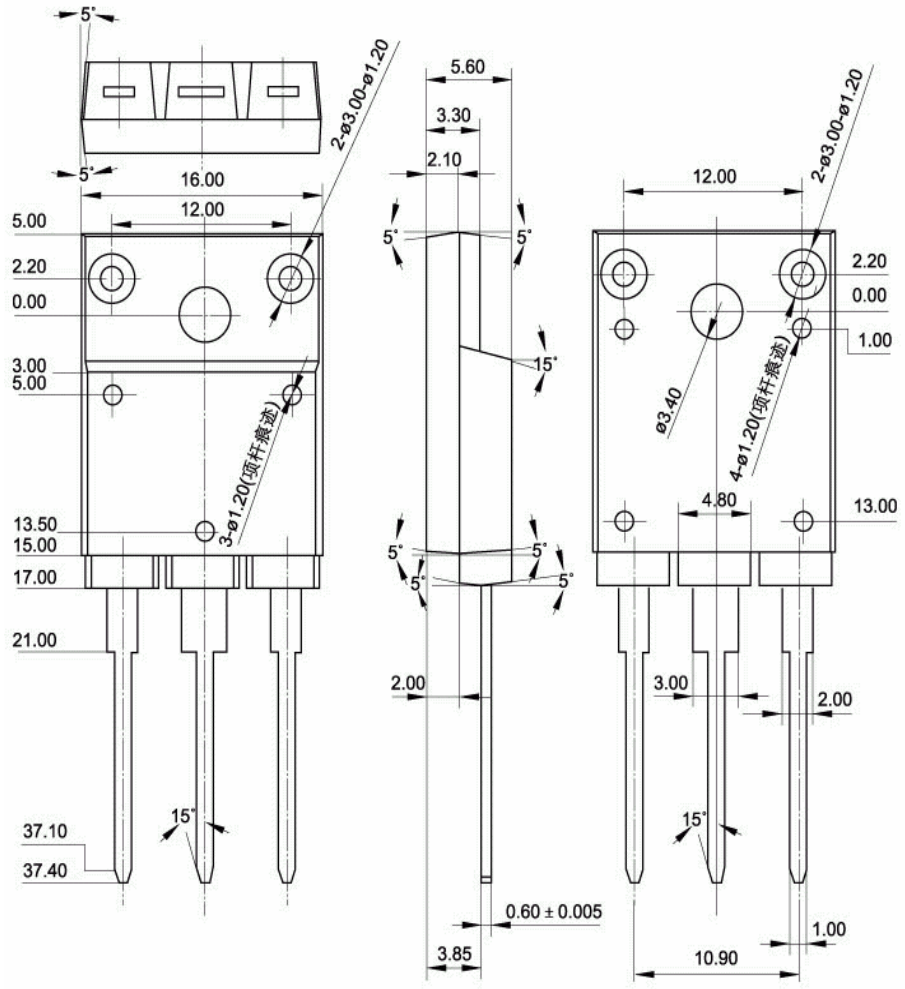

Fig.2 outline dimensions