Silicon NPN Power Transistors 2SD1654

DESCRIPTION

·With TO-3PML package
·High voltage;high speed
·High reliability.

APPLICATIONS

·For color TV horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

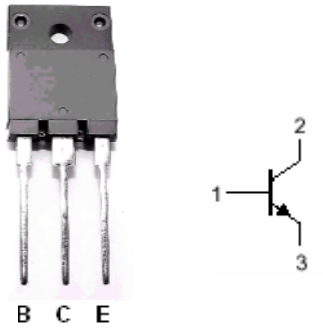

Fig.1 simplified outline (TO-3PML) and symbol

Absolute maximum ratings(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		3.5	A
I_{CM}	Collector current-peak		10	A
P_C	Collector power dissipation	T_C=25□	50	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
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=0.1A; R_{BE}=∞	800			
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=5mA; I_E=0	1500			
V_{CEsat}	Collector-emitter saturation voltage	I_C=2.5A;I_B=0.8A			8.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=2.5A;I_B=0.8A			1.5	V
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			1.0	mA
I_{CBO}	Collector cut-off current	V_{CB}=800V; I_E=0			10	μA
h_{FE}	DC current gain	I_C=0.5 A ; V_{CE}=5V	8			
f_T	Transition frequency	I_C=0.5 A ; V_{CE}=10V		3		MHz
t_f	Fall time	I_C=3A;I_{B1}=0.8A;I_{B2}=-1.6A V_{CC}=200V;R_L=66.7Ω			0.7	μs

PACKAGE OUTLINE

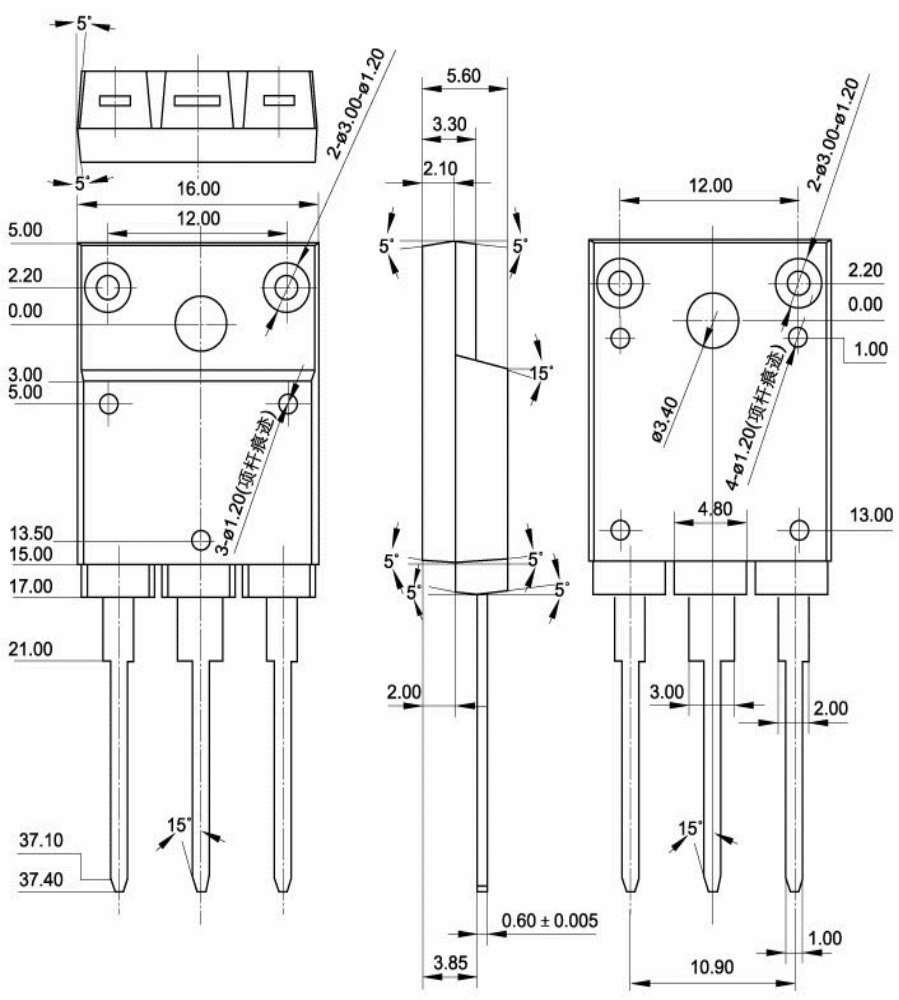

Fig.2 Outline dimensions