

Silicon PNP Darlington Power Transistors

2SB1588

DESCRIPTION

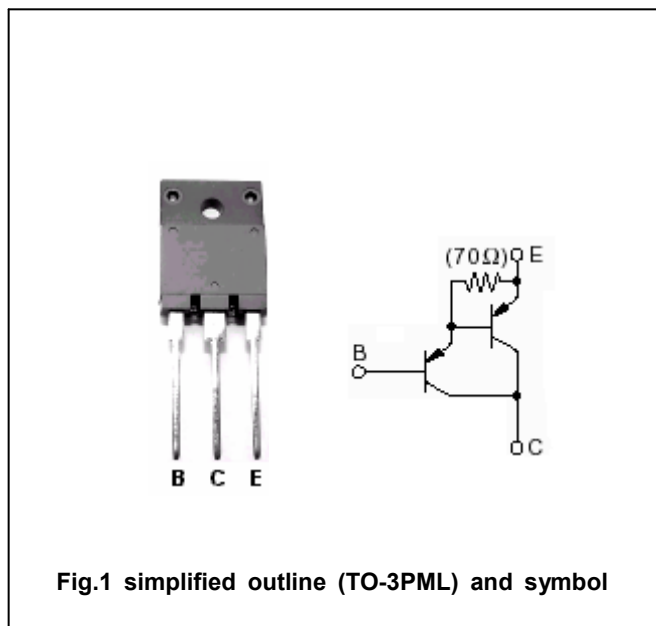
- With TO-3PML package
- Complement to type 2SD2439

APPLICATIONS

- Audio ,regulator and general purpose

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings($T_c=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-160	V
V_{CEO}	Collector-emitter voltage	Open base	-150	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-10	A
I_B	Base current		-1	A
P_C	Collector power dissipation	$T_c=25^\circ\text{C}$	80	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-50mA$; $I_B=0$	-150			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-7A$; $I_B=-7mA$			-2.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=-7A$; $I_B=-7mA$			-3.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=-160V$; $I_E=0$			-100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-5V$; $I_C=0$			-100	μA
h_{FE}	DC current gain	$I_C=-7A$; $V_{CE}=-4V$	5000			
f_T	Transition frequency	$I_C=-2A$; $V_{CE}=-12V$		50		MHz
C_{OB}	Output capacitance	$I_E=0$; $V_{CB}=-10V$; $f=1MHz$		230		pF

Switching times

t_{on}	Turn-on time	$I_C=-7A$; $R_L=10\Omega$ $I_{B1}=-I_{B2}=-7mA$ $V_{CC}=-70V$		0.8		μs
t_s	Storage time			3.0		μs
t_f	Fall time			1.2		μs

◆ h_{FE} classifications

O	P	Y
5000-12000	6500-20000	15000-30000

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PACKAGE OUTLINE

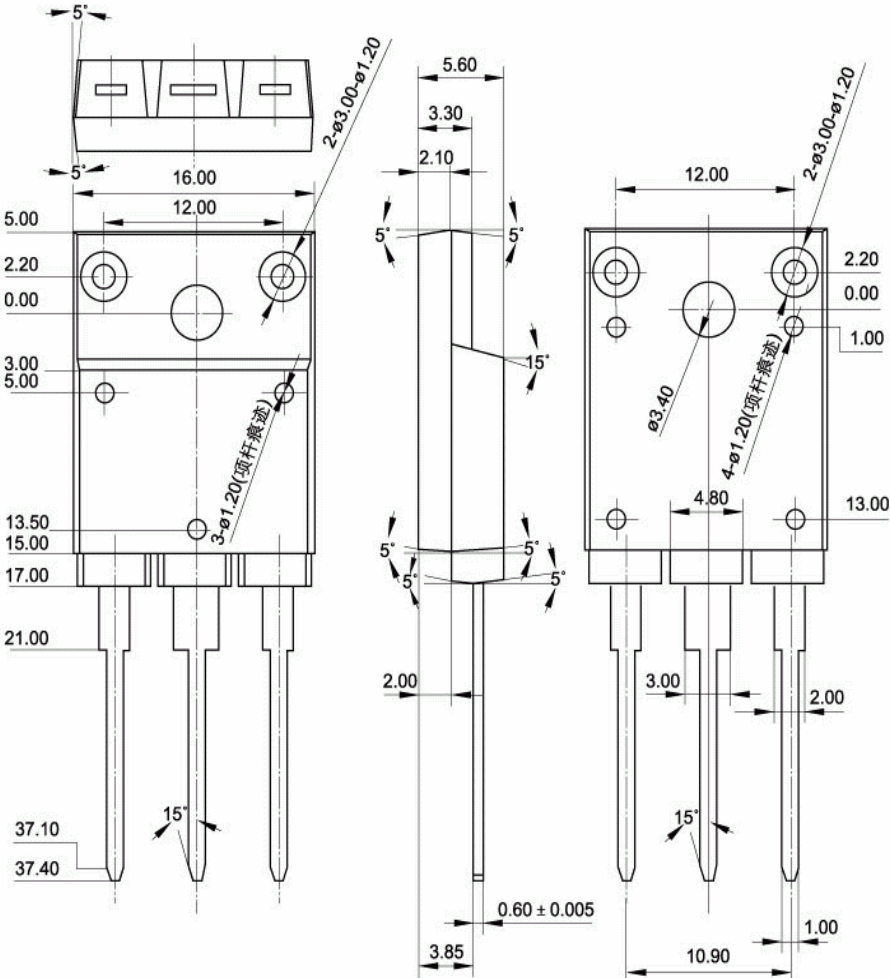


Fig.2 Outline dimensions