

Silicon NPN Power Transistors

2SC3117

DESCRIPTION

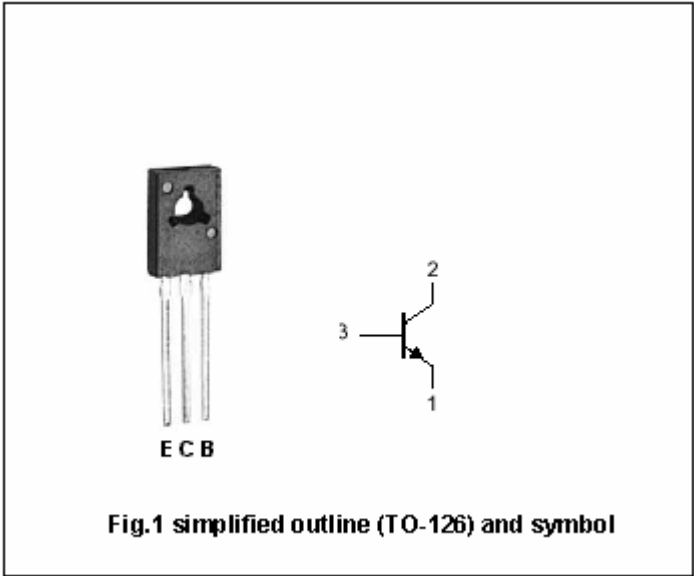
- With TO-126 package
- Complement to type 2SA1249
- High breakdown voltage
- Large current capacity

APPLICATIONS

- Color TV sound output;converters; Inverters' applications
- 160V/1.5A switching applications

PINNING

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



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	180	V
V _{CEO}	Collector-emitter voltage	Open base	160	V
V _{EBO}	Emitter-base voltage	Open collector	6	V
I _C	Collector current		1.5	A
I _{CM}	Collector current-peak		2.5	A
P _C	Collector power dissipation	T _a =25°C	1.0	W
		T _C =25°C	10	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°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	$I_C=1mA$; $R_{BE}=\infty$		160		V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=10\mu A$; $I_E=0$		180		V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\mu A$; $I_C=0$		6		V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=500mA$; $I_B=50mA$		0.13	0.45	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=500mA$; $I_B=50mA$		0.85	1.2	V
I_{CBO}	Collector cut-off current	$V_{CB}=120V$; $I_E=0$			1.0	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=4V$; $I_C=0$			1.0	μA
h_{FE-1}	DC current gain	$I_C=100mA$; $V_{CE}=5V$	100		400	
h_{FE-2}	DC current gain	$I_C=10mA$; $V_{CE}=5V$	90			
f_T	Transition frequency	$I_C=50mA$; $V_{CE}=10V$		120		MHz
C_{ob}	Output capacitance	$I_E=0$; $V_{CB}=10V$; $f=1MHz$		22		pF

◆ h_{FE-1} Classifications

R	S	T
100-200	140-280	200-400

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PACKAGE OUTLINE

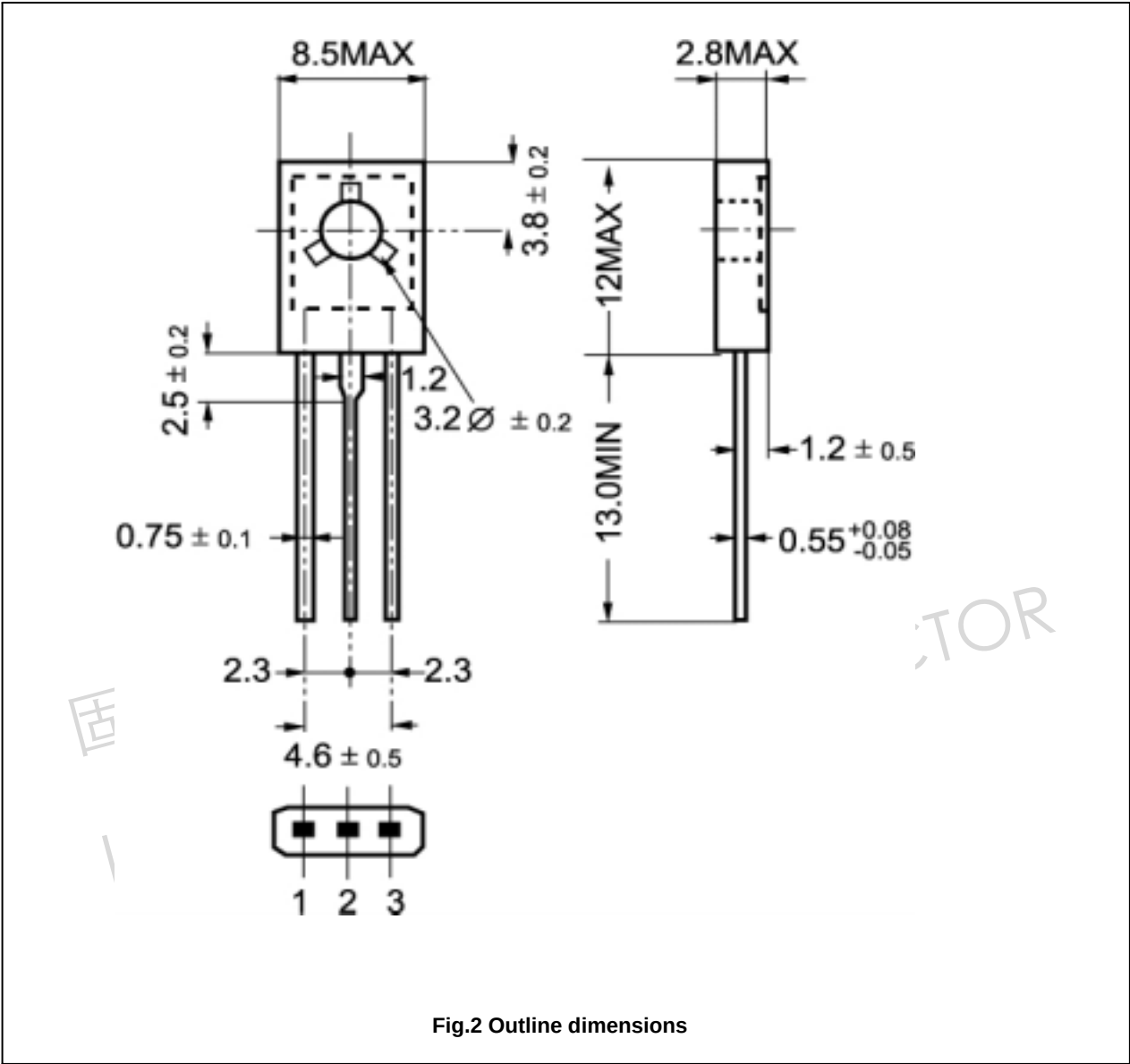


Fig.2 Outline dimensions

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