

Silicon NPN Power Transistors

2SC2752

DESCRIPTION

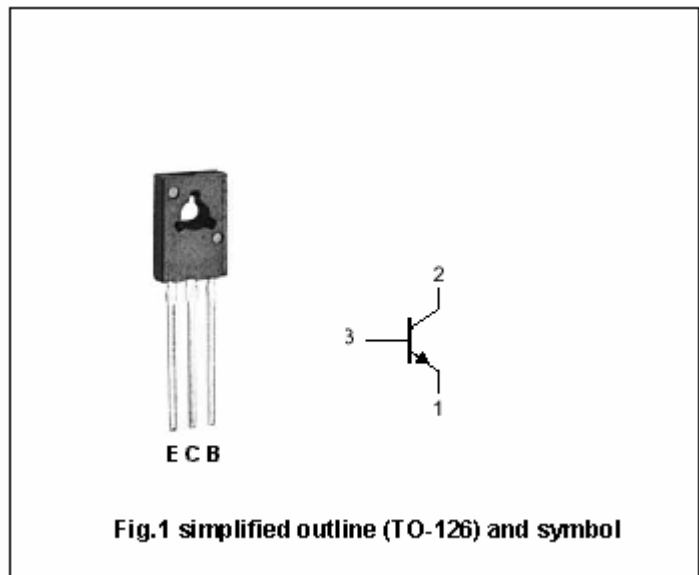
- With TO-126 package
- High breakdown voltage
- Low collector saturation voltage

APPLICATIONS

- Low power switching regulator
- DC-DC converter
- High voltage switch

PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		0.5	A
I_{CM}	Collector current-peak		1.0	A
I_B	Base current		0.25	A
P_C	Collector power dissipation	$T_a=25^\circ\text{C}$	1.0	W
		$T_C=25^\circ\text{C}$	10	
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
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.3A$; $I_{B1}=0.06A$, $L=10mH$	400			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=300mA$; $I_B=60mA$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=300mA$; $I_B=60mA$			1.2	V
I_{CEX}	Collector cut-off current	$V_{CE}=400V$; $V_{BE}=-1.5V$ $T_C=125^\circ C$			0.01 1.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$			10	μA
h_{FE-1}	DC current gain	$I_C=50mA$; $V_{CE}=5V$	20		80	
h_{FE-2}	DC current gain	$I_C=300mA$; $V_{CE}=5V$	10			

Switching times

t_{on}	Turn-on time	$I_C=300mA$; $I_{B1}=-I_{B2}=60mA$ $PW \approx 50\mu s$; $V_{CC} \approx 150V$ $R_L=500\Omega$			1.0	μs
t_{stg}	Storage time				2.5	μs
t_f	Fall time				1.0	μs

◆ h_{FE-1} Classifications

M	L	K
20-40	30-60	40-80

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PACKAGE OUTLINE

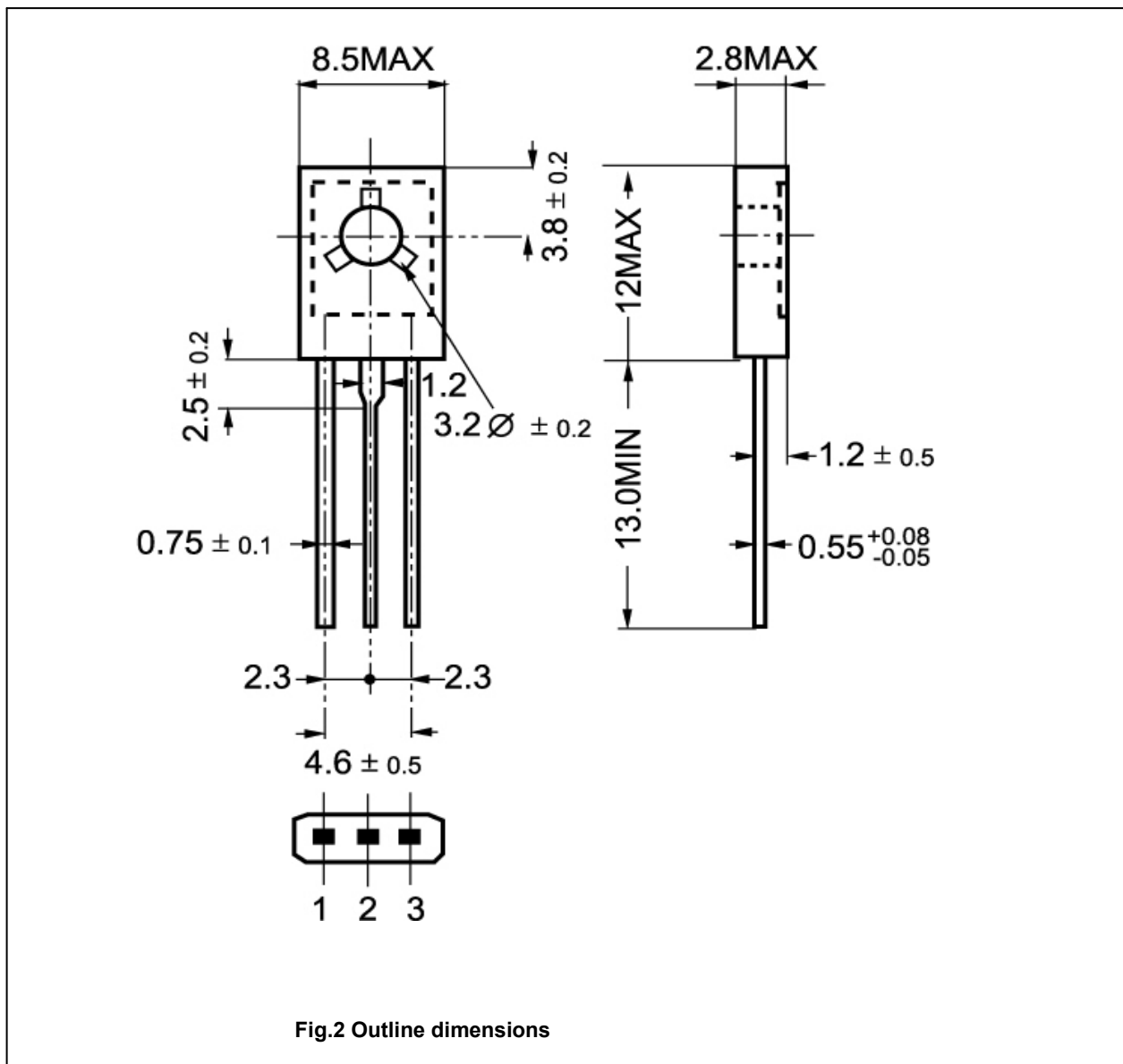


Fig.2 Outline dimensions