

Silicon PNP Power Transistors

2SA1359

DESCRIPTION

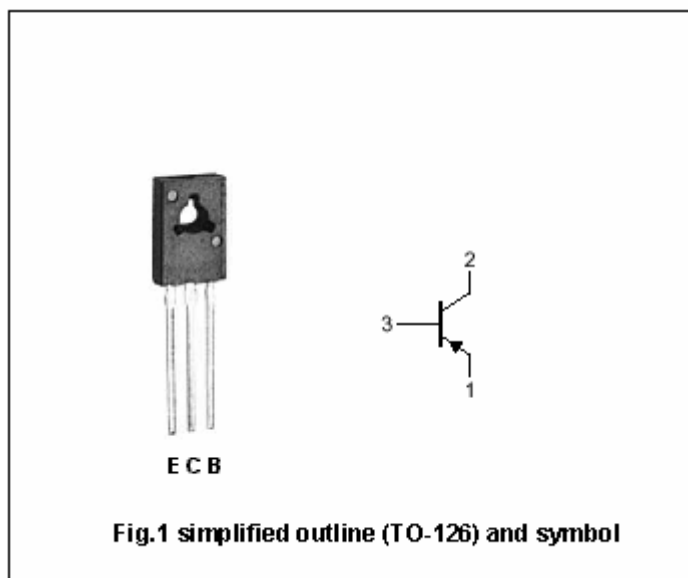
- With TO-126 package
- Complement to type 2SC3422
- Good linearity of h_{FE}

APPLICATIONS

- Audio frequency amplifier
- Low speed switching
- Suitable for output stage of 5W car radio and car stereo

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	-40	V
V_{CEO}	Collector-emitter voltage	Open base	-40	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-3	A
I_B	Base current		-1	A
P_D	Total power dissipation	$T_a=25^\circ\text{C}$	1.5	W
		$T_C=25^\circ\text{C}$	10	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		$-55^\circ\text{C}+150^\circ\text{C}$	$^\circ\text{C}$

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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	$I_C=-10mA$; $I_B=0$	-40			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-2A$; $I_B=-0.2A$			-0.8	V
V_{BE}	Base-emitter on voltage	$I_C=-0.5A$; $V_{CE}=-2V$			-1.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=-40V$; $I_E=0$			-0.1	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-5V$; $I_C=0$			-0.1	μA
h_{FE-1}	DC current gain	$I_C=-0.5A$; $V_{CE}=-2V$	80		240	
h_{FE-2}	DC current gain	$I_C=-2.5A$; $V_{CE}=-2V$	25			
C_{ob}	Output capacitance	$I_E=0$; $V_{CB}=-10V$ f=1MHz		35		pF
f_T	Transition frequency	$I_C=-0.5A$; $V_{CE}=-2V$		100		MHz

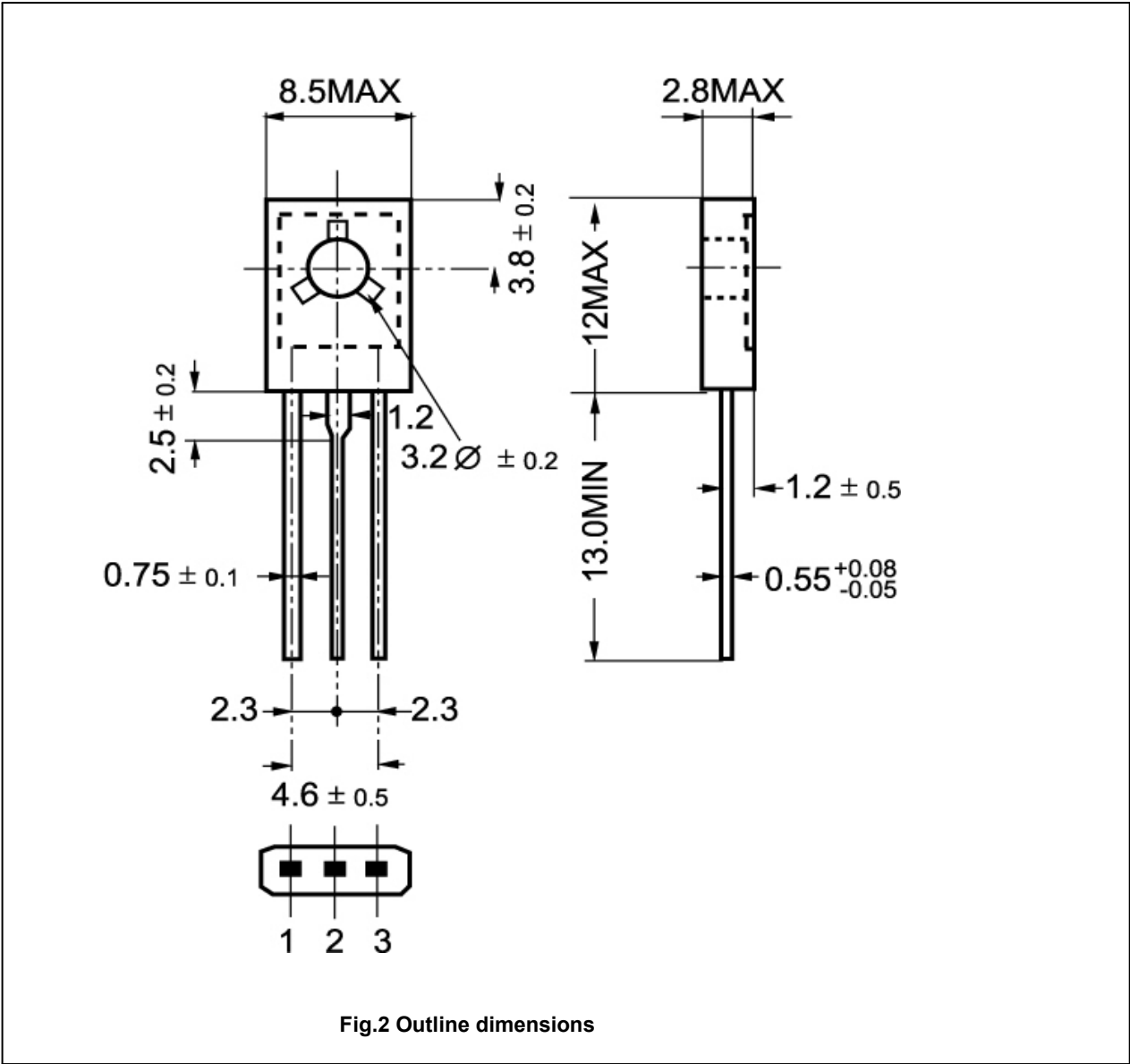
◆ h_{FE-1} Classifications

O	Y
80-160	120-240

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PACKAGE OUTLINE



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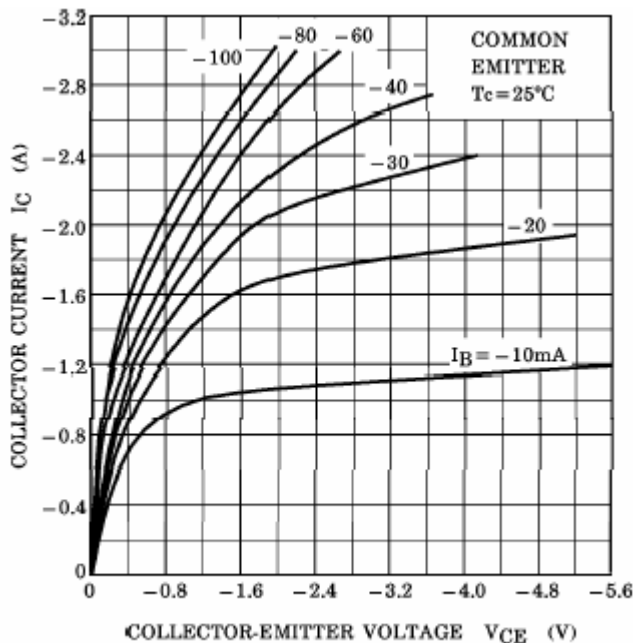


Fig.3 Static Characteristic

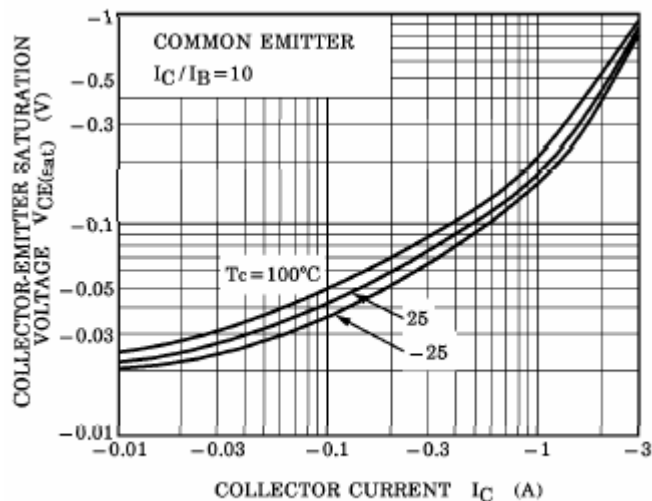


Fig.5 Collector-Emitter Saturation Voltage

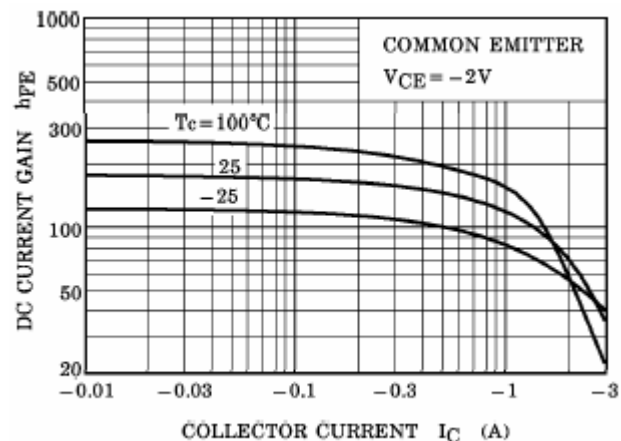


Fig.4 DC current Gain

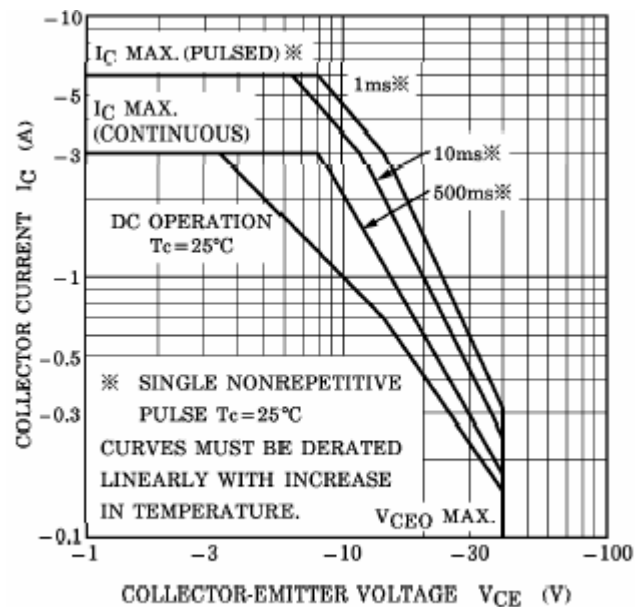


Fig.6 Safe Operating Area