

## Silicon PNP Power Transistors

2SA1359

## DESCRIPTION

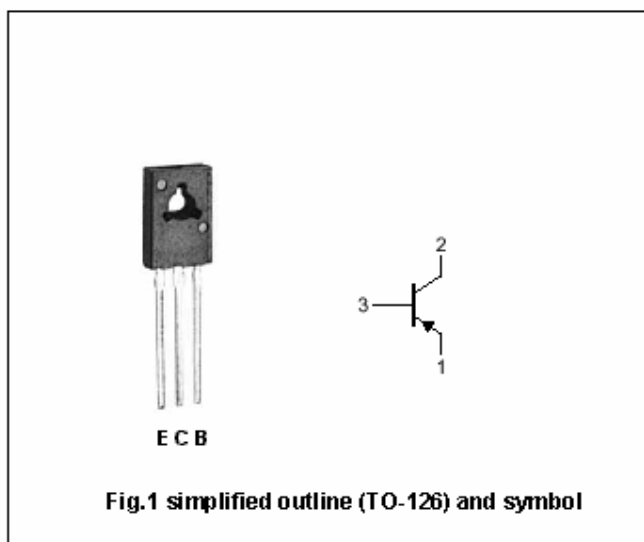
- With TO-126 package
- Complement to type 2SC3422
- Good linearity of  $h_{FE}$

## 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	$^\circ\text{C}$

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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	$\mu A$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=-5V$ ; $I_C=0$			-0.1	$\mu A$
$h_{FE-1}$	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

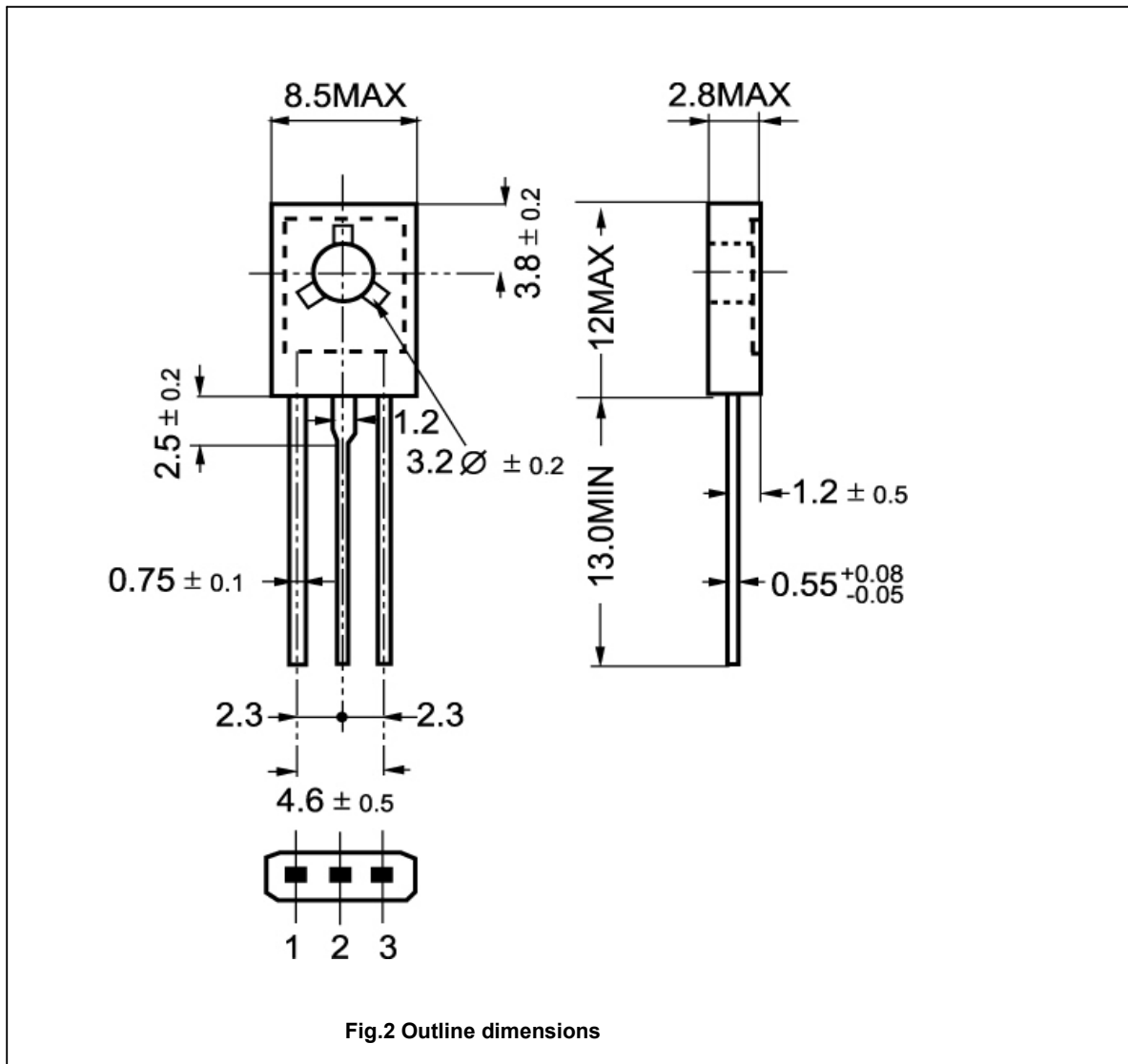
◆  $h_{FE-1}$  Classifications

O	Y
80-160	120-240

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## PACKAGE OUTLINE



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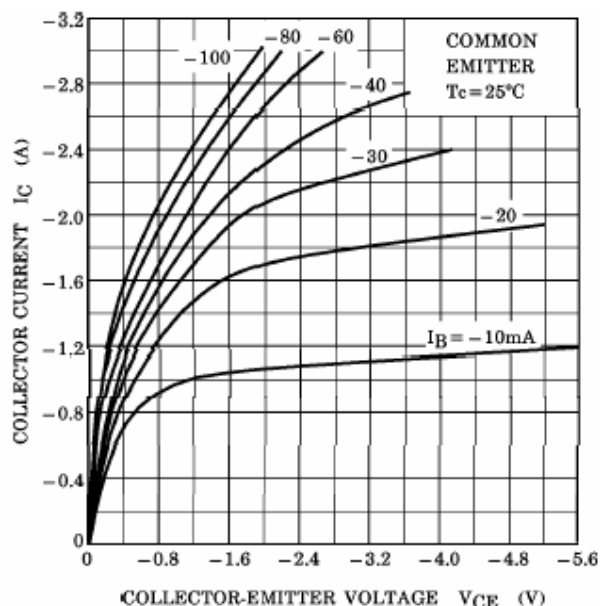


Fig.3 Static Characteristic

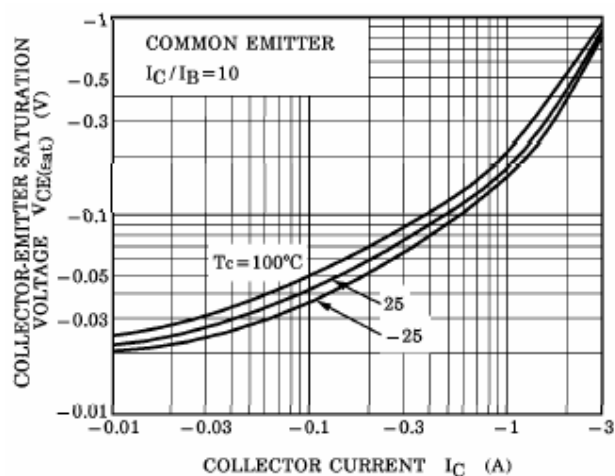


Fig.5 Collector-Emitter Saturation Voltage

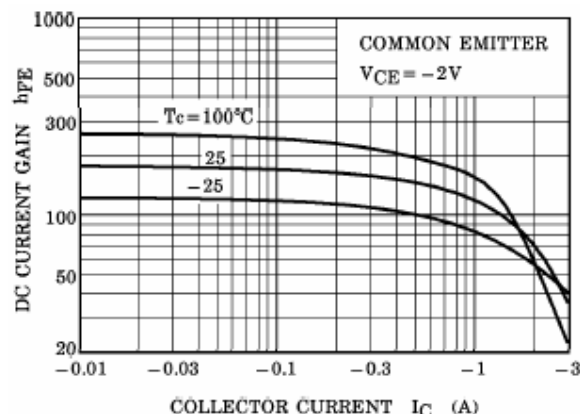


Fig.4 DC current Gain

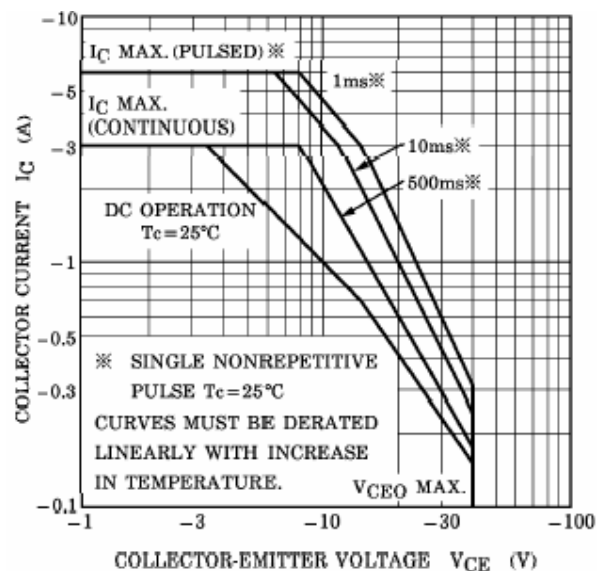


Fig.6 Safe Operating Area