

## Silicon NPN Power Transistors

2SC5358

## DESCRIPTION

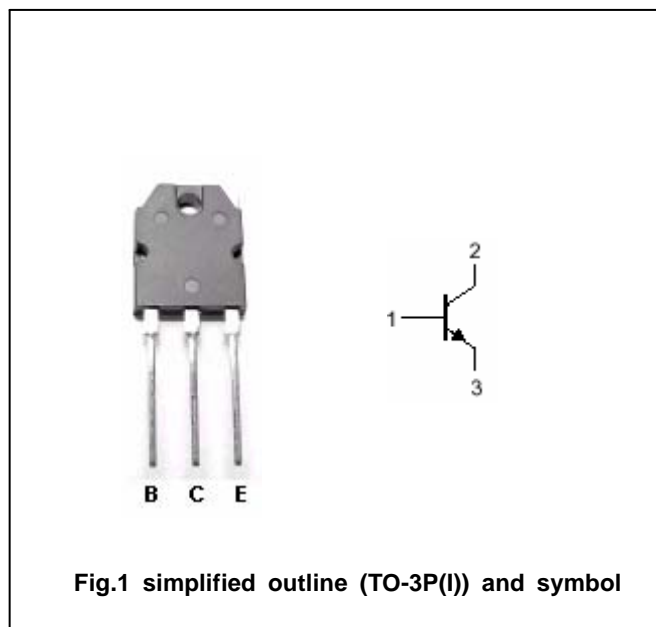
- With TO-3P(I) package
- Complement to type 2SA1986

## APPLICATIONS

- Power amplifier applications
- Recommend for 80W high fidelity audio frequency amplifier output stage

## PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	230	V
$V_{CEO}$	Collector-emitter voltage	Open base	230	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		15	A
$I_B$	Base current		1.5	A
$P_C$	Collector power dissipation	$T_c=25$	150	W
$T_j$	Junction temperature		150	
$T_{stg}$	Storage temperature		-55~150	

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## CHARACTERISTICS

 $T_j=25$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=50mA; I_B=0$	230			V
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=8A; I_B=0.8A$			3.0	V
$V_{BE}$	Base-emitter voltage	$I_C=7A; V_{CE}=5V$			1.5	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=230V; I_E=0$			5	$\mu A$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=5V; I_C=0$			5	$\mu A$
$h_{FE-1}$	DC current gain	$I_C=1A; V_{CE}=5V$	55		160	
$h_{FE-2}$	DC current gain	$I_C=7A; V_{CE}=5V$	35			
$f_T$	Transition frequency	$I_C=1A; V_{CE}=5V$		30		MHz
$C_{OB}$	Output capacitance	$I_E=0; V_{CB}=10V; f=1MHz$		200		pF

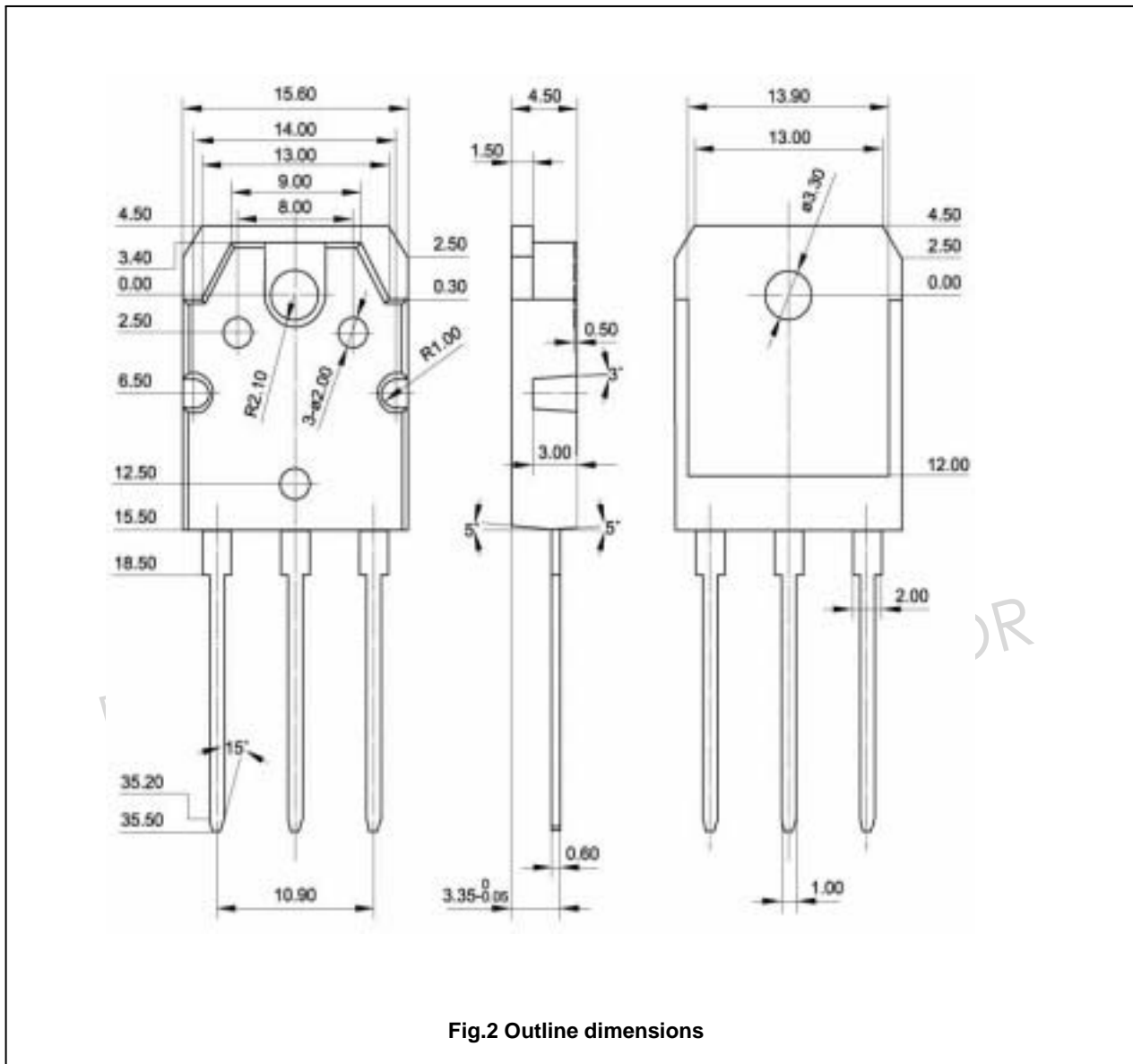
◆  $h_{FE-1}$  classifications

R	O
55-110	80-160

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PACKAGE OUTLINE



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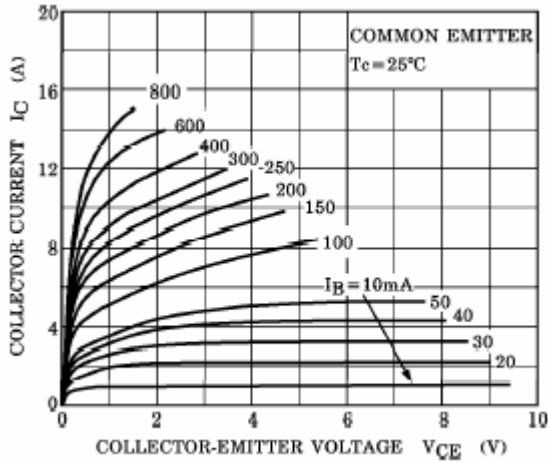


Fig.3 Static Characteristic

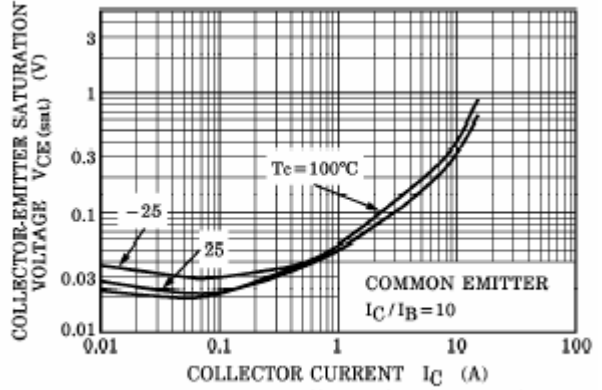


Fig.4 Collector-Emitter Saturation Voltage

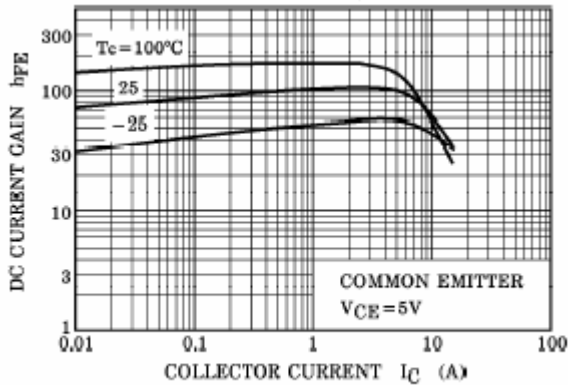


Fig.5 DC current Gain

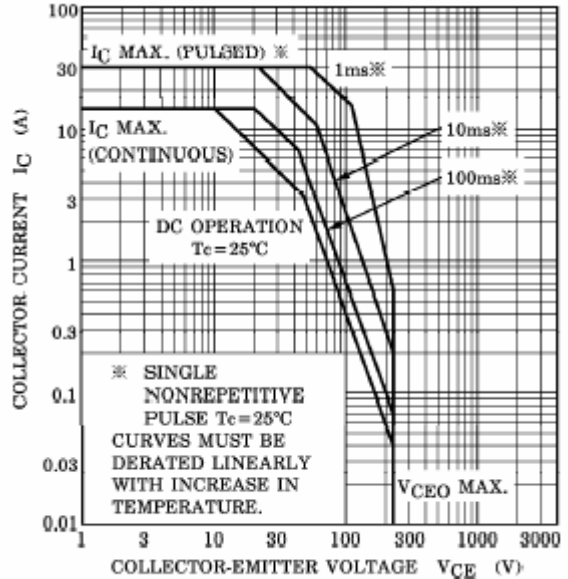


Fig.6 Safe Operating Area