

## Silicon PNP Power Transistors

NS50P

## DESCRIPTION

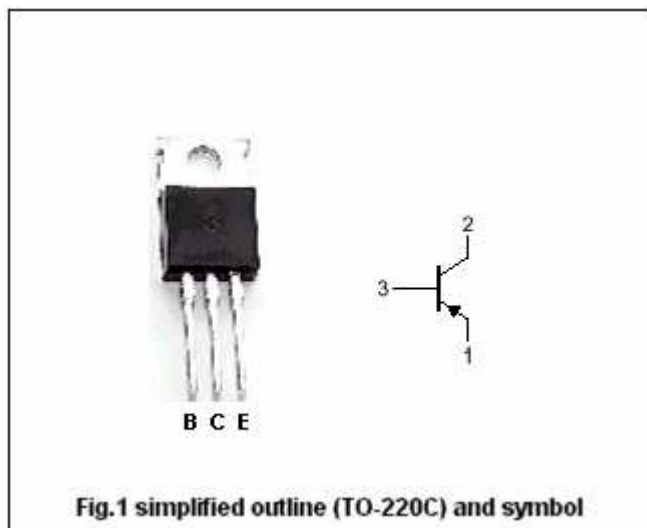
- With TO-220C package
- Complement to type NS50N

## APPLICATIONS

- For medium power linear amplifier applications

## PINNING

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

ABSOLUTE MAXIMUM RATINGS( $T_c=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-60	V
$V_{CEO}$	Collector-emitter voltage	Open base	-60	V
$V_{EBO}$	Emitter-base voltage	Open collector	-5	V
$I_C$	Collector current (DC)		-6	A
$I_{CM}$	Collector current-Pulse		-10	A
$I_B$	Base current		-2	A
$P_C$	Collector power dissipation	$T_c=25^\circ\text{C}$	65	W
		$T_a=25^\circ\text{C}$	2	
$T_j$	Junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-65~150	$^\circ\text{C}$

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## CHARACTERISTICS

T<sub>j</sub>=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE0(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =-30mA; I <sub>B</sub> =0	-60			V
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-6A ; I <sub>B</sub> =-0.6A			-1.5	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =-6A ; V <sub>CE</sub> =-4V			-2.0	V
I <sub>CES</sub>	Collector cut-off current	V <sub>CE</sub> =-60V; V <sub>EB</sub> =0			-0.4	mA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-30V; I <sub>B</sub> =0			-0.7	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-5V; I <sub>C</sub> =0			-1.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-0.3A ; V <sub>CE</sub> =-4V	50		160	
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-3A ; V <sub>CE</sub> =-4V	15			
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-10V	3			MHz

◆ h<sub>FE-1</sub> Classifications

A	B
50-100	80-160

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## PACKAGE OUTLINE

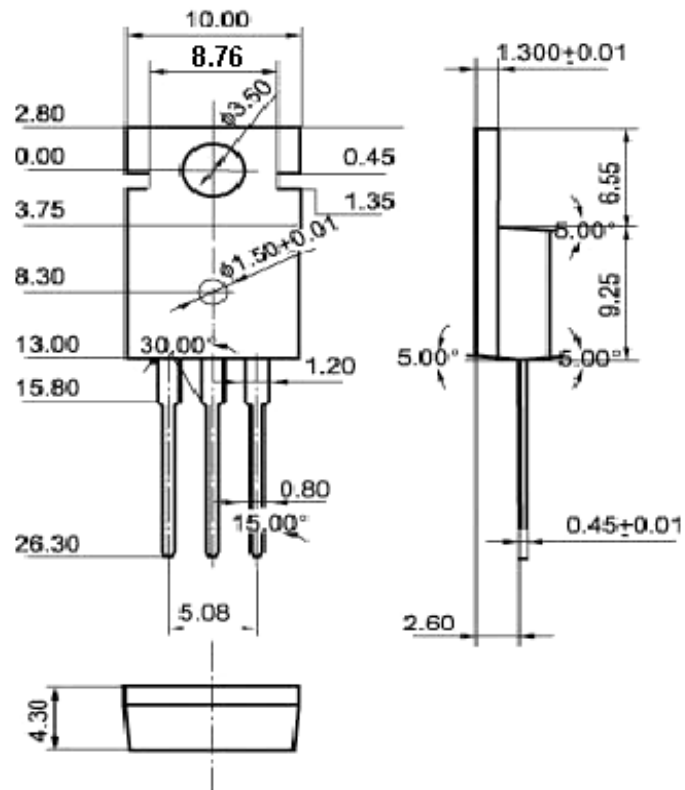


Fig.2 Outline dimensions