Silicon NPN Power Transistors NS50N

DESCRIPTION

·With TO-220C package
·Complement to type NS50P

APPLICATIONS

·For medium power linear amplifier applications

PINNING

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

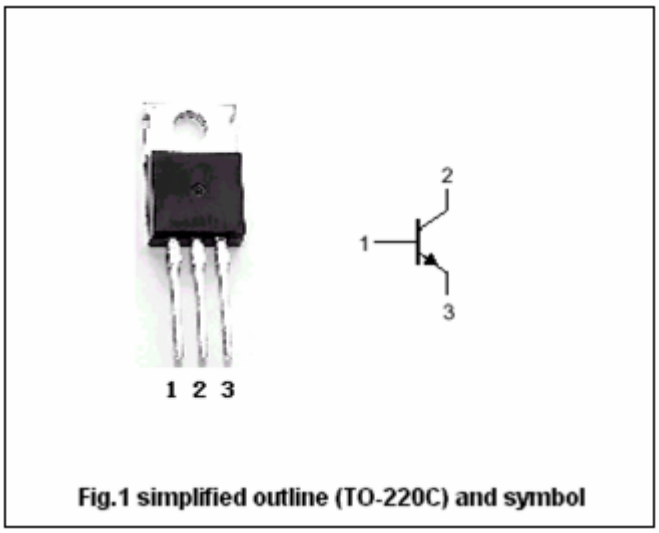

Fig.1 simplified outline (TO-220C) and symbol

ABSOLUTE MAXIMUM RATINGS(Tc=25□)

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□	65	W
		T_a=25□	2	
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-65~150	□

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=30mA; I_B=0	60			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=6A; I_B=0.6A			1.5	V
V_{BE}	Base-emitter on voltage	I_C=6A ; V_{CE}=4V			2.0	V
I_{CES}	Collector cut-off current	V_{CE}=60V; V_{EB}=0			0.4	mA
I_{CEO}	Collector cut-off current	V_{CE}=30V; I_B=0			0.7	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			1.0	mA
h_{FE-1}	DC current gain	I_C=0.3A ; V_{CE}=4V	50		160	
h_{FE-2}	DC current gain	I_C=3A ; V_{CE}=4V	15			
f_T	Transition frequency	I_C=0.5A ; V_{CE}=10V	3			MHz

◆ **h_{FE-1} Classifications**

A	B
50-100	80-160

PACKAGE OUTLINE

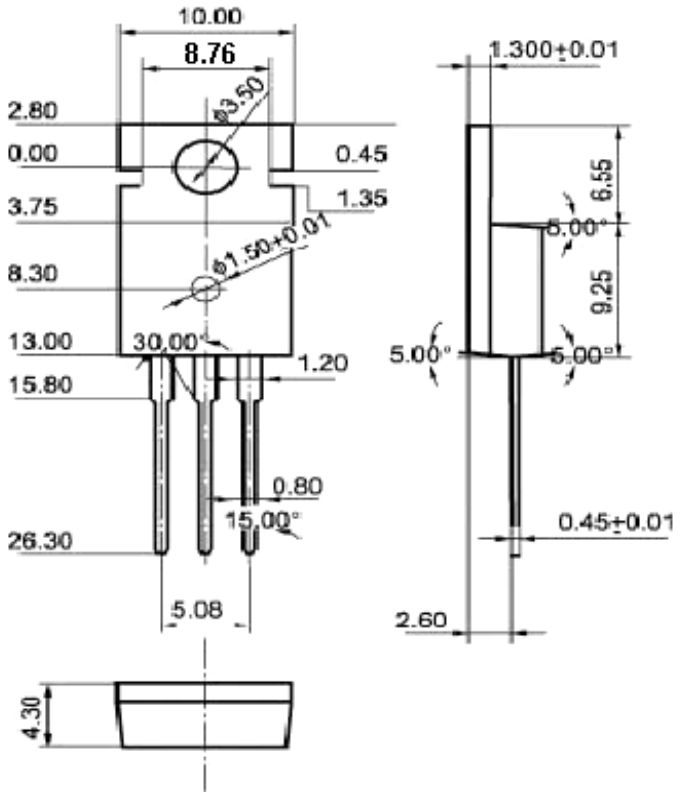

Fig.2 Outline dimensions