Silicon NPN Power Transistors 2SD525

DESCRIPTION

·With TO-220C package
·Complement to type 2SB595
·High breakdown voltage :V_{CEO}=100V
·Low collector saturation volage
: $V_{CE(sat)}$=2.0V(Max)

APPLICATIONS

·Power amplifier applications
·Recommend for 30W high fidelity audio frequency amplifier output stage

PINNING

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

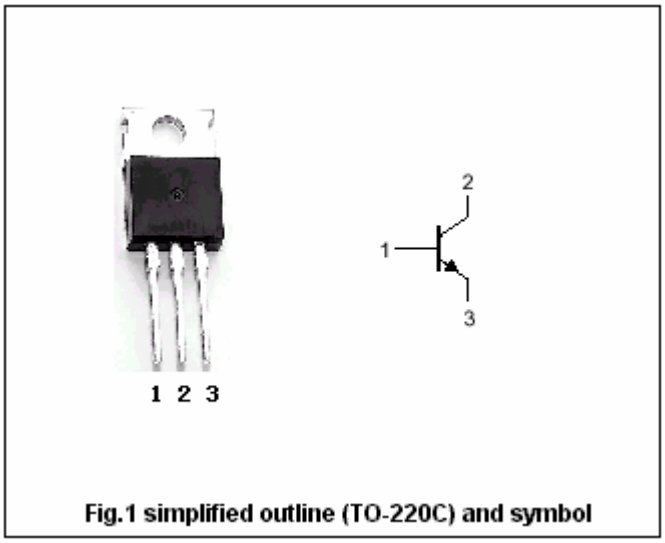

Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Tc=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	100	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		5	A
I_E	Emitter current		-5	A
P_C	Collector power dissipation	T_C=25□	40	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=50mA; I_B=0	100			V
$V_{(BR)EBO}$	Emitter-base breakdown votage	I_E=10mA; I_C=0	5			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=4A;I_B=0.4 A			2.0	V
V_{BE}	Base-emitter voltage	I_C=1A ; V_{CE}=5V			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=100V; I_E=0			100	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			1	mA
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=5V	40		240	
h_{FE-2}	DC current gain	I_C=4A ; V_{CE}=5V	20			
f_T	Transition frequency	I_C=1A ; V_{CE}=5V		12		MHz
C_{OB}	Output capacitance	I_E=0; V_{CB}=10V;f=1MHz		100		pF

◆ **h_{FE-1} classifications**

R	O	Y
40-80	70-140	120-240

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PACKAGE OUTLINE

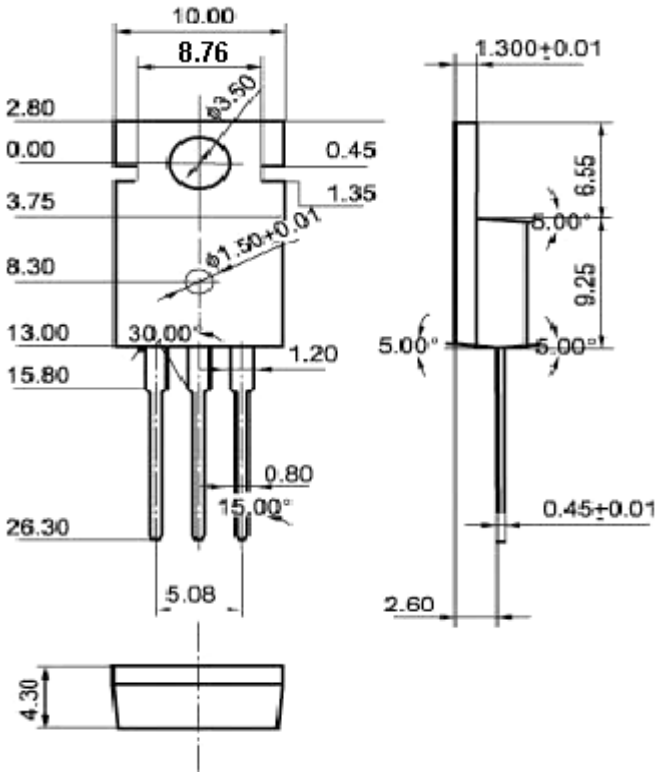

Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)