

Silicon NPN Power Transistors

2SD424

DESCRIPTION

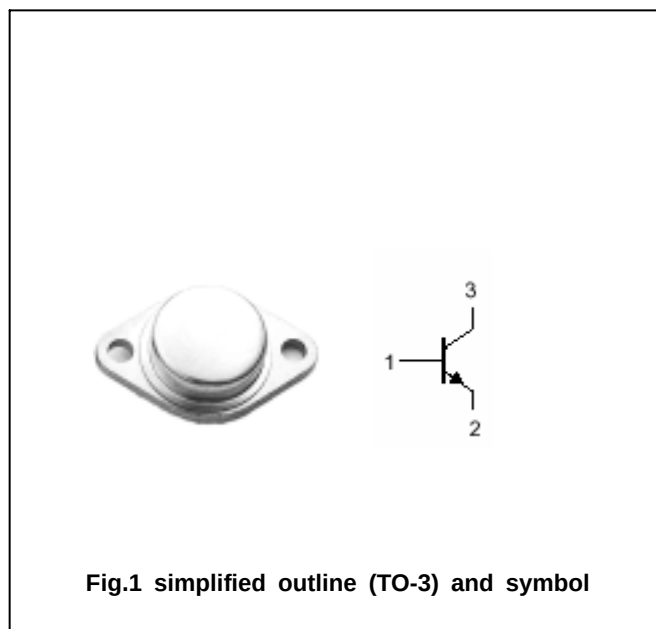
- With TO-3 package
 - Complement to type 2SB554
 - High power dissipation
 - High collector-emitter breakdown voltage
- : $V_{CEO}=180V(\text{min})$

APPLICATIONS

- Power amplifier applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	180	V
V_{CEO}	Collector-emitter voltage	Open base	180	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	$T_C=25^{\circ}\text{C}$	150	W
T_j	Junction temperature		150	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-55~150	$^{\circ}\text{C}$

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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	$I_C=0.1A ; I_B=0$	180			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10mA ; I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=10A ; I_B=1A$			3.0	V
V_{BE}	Base-emitter on voltage	$I_C=10A ; V_{CE}=5V$			2.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=90V ; I_E=0$			0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V ; I_C=0$			0.1	mA
h_{FE}	DC current gain	$I_C=2A ; V_{CE}=5V$	40		140	
C_{OB}	Output capacitance	$I_E=0 ; V_{CB}=10V ; f=1.0MHz$		300		pF
f_T	Transition frequency	$I_C=2A ; V_{CE}=5V$		5		MHz

◆ h_{FE} Classifications

R	O
40-80	70-140

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PACKAGE OUTLINE

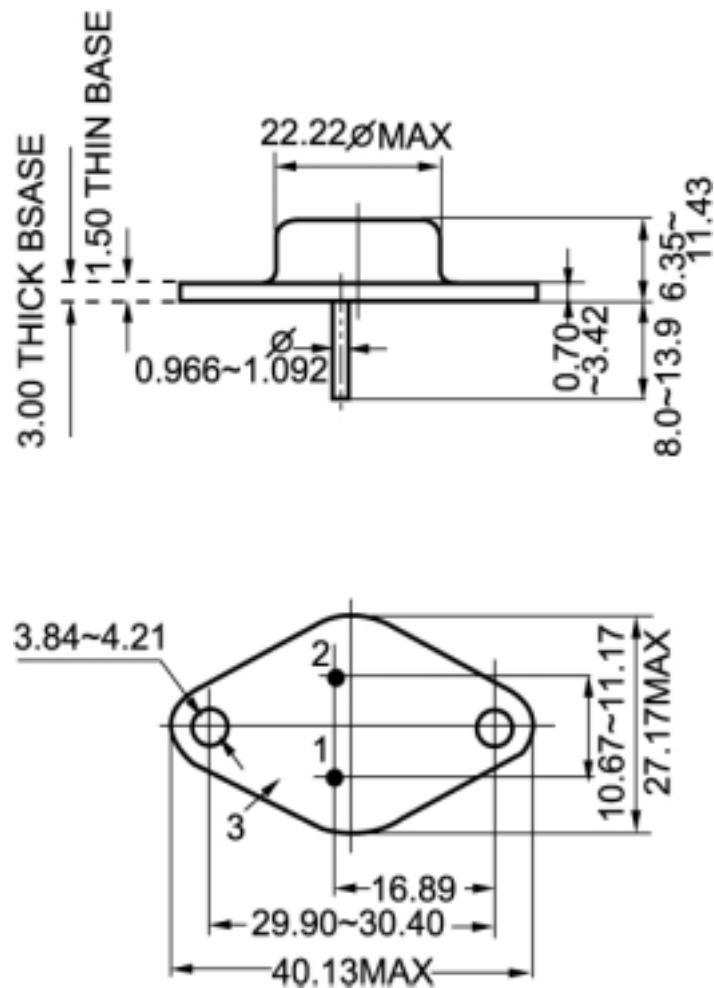


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)