

Silicon NPN Power Transistors

2SD1267 2SD1267A

DESCRIPTION

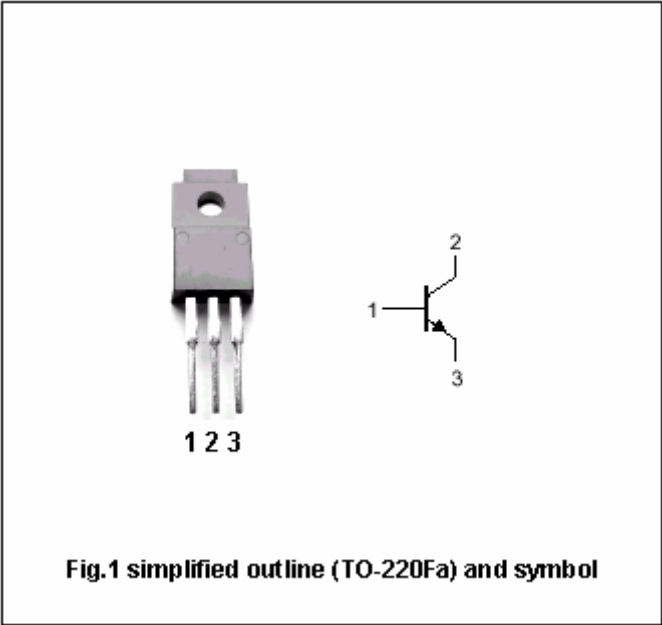
- With TO-220Fa package
- High forward current transfer ratio h_{FE} which has satisfactory linearity
- Low collector saturation voltage
- Complement to type 2SB942/942A

APPLICATIONS

- For power amplification

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



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

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SD1267	Open emitter	60	V
		2SD1267A		80	
V_{CEO}	Collector-emitter voltage	2SD1267	Open base	60	V
		2SD1267A		80	
V_{EBO}	Emitter-base voltage		Open collector	5	V
I_C	Collector current			4	A
I_{CM}	Collector current-peak			8	A
P_C	Collector power dissipation	$T_a=25^{\circ}\text{C}$		2	W
		$T_C=25^{\circ}\text{C}$		40	
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	2SD1267	$I_C=30mA, I_B=0$	60			V
		2SD1267A		80			
V_{CEsat}	Collector-emitter saturation voltage		$I_C=4A, I_B=0.4A$			1.5	V
V_{BE}	Base-emitter voltage		$I_C=3A; V_{CE}=4V$			2.0	V
I_{EBO}	Emitter cut-off current		$V_{EB}=5V; I_C=0$			1.0	mA
I_{CEO}	Collector cut-off current	2SD1267	$V_{CE}=30V; I_B=0$			0.7	mA
		2SD1267A	$V_{CE}=60V; I_B=0$				
I_{CES}	Collector cut-off current	2SD1267	$V_{CE}=60V; V_{BE}=0$			0.4	mA
		2SD1267A	$V_{CE}=80V; V_{BE}=0$				
h_{FE-1}	DC current gain		$I_C=1A; V_{CE}=4V$	70		250	
h_{FE-2}	DC current gain		$I_C=3A; V_{CE}=4V$	15			
f_T	Transition frequency		$I_C=0.5A; V_{CE}=5V, f=1MHz$		20		MHz

Switching times

t_{on}	Turn-on time	$I_C=4A; I_{B1}=-I_{B2}=0.4A$ $V_{CC}=50V$		0.4		μs
t_{stg}	Storage time			1.5		μs
t_f	Fall time			0.5		μs

◆ h_{FE-1} Classifications

Q	P
70-150	120-250

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PACKAGE OUTLINE

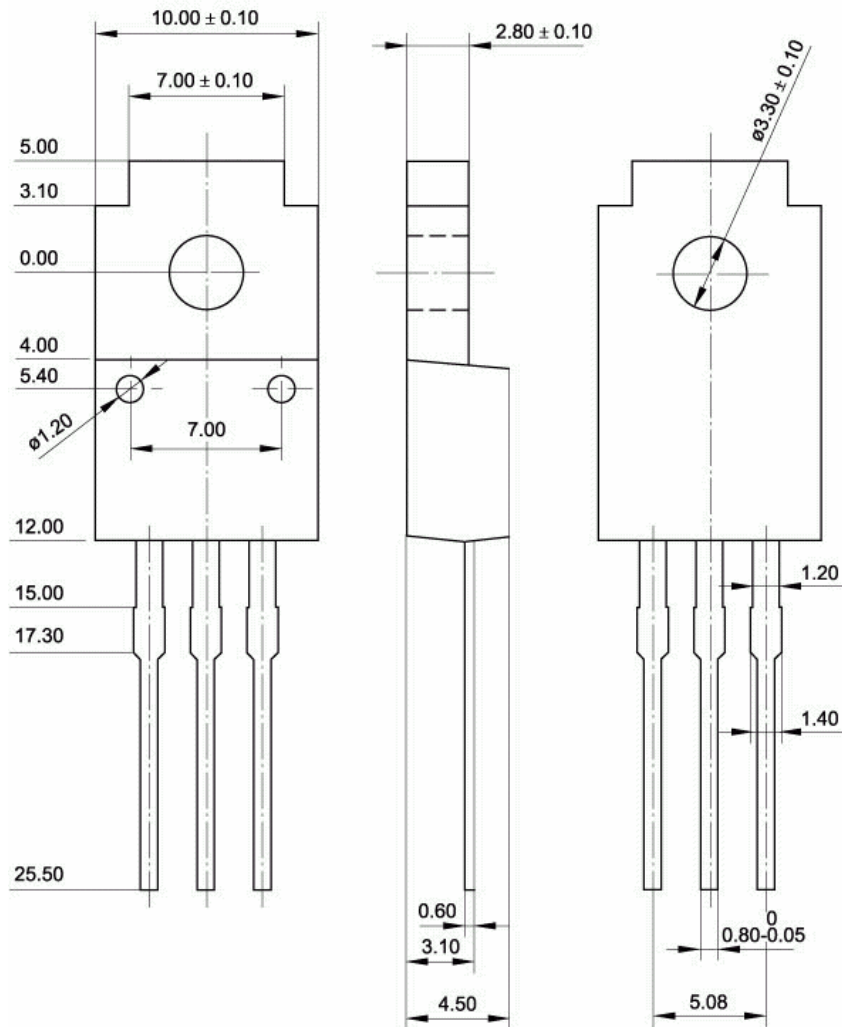


Fig.2 Outline dimensions (unindicated tolerance: ±0.15 mm)

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