

2SD1267, 2SD1267A

Silicon NPN Triple-Diffused Planar Type

Power Amplifier

Complementary Pair with 2SB942, 2SB942A

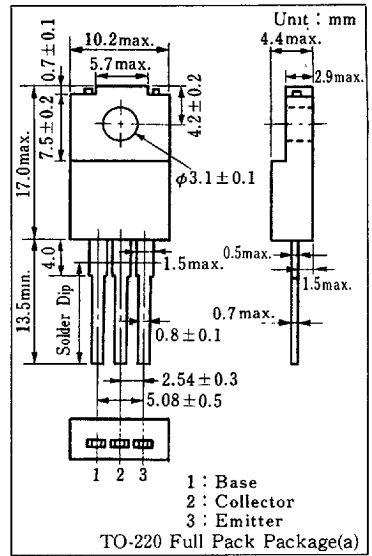
■ Features

- High DC current gain (h_{FE}) and good linearity
- Low collector-emitter saturation voltage ($V_{CE(sat)}$)
- "Full Pack" package for simplified mounting on a heat sink with one screw

■ Absolute Maximum Ratings ($T_c=25^\circ\text{C}$)

Item	Symbol	Value	Unit
Collector-base voltage	2SD1267	60	V
	2SD1267A	80	
Collector-emitter voltage	2SD1267	60	V
	2SD1267A	80	
Emitter-base voltage	V_{EBO}	5	V
Peak collector current	I_{CP}	8	A
Collector current	I_C	4	A
Collector power dissipation	$T_c = 25^\circ\text{C}$	40	W
	$T_a = 25^\circ\text{C}$	2	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

■ Package Dimensions



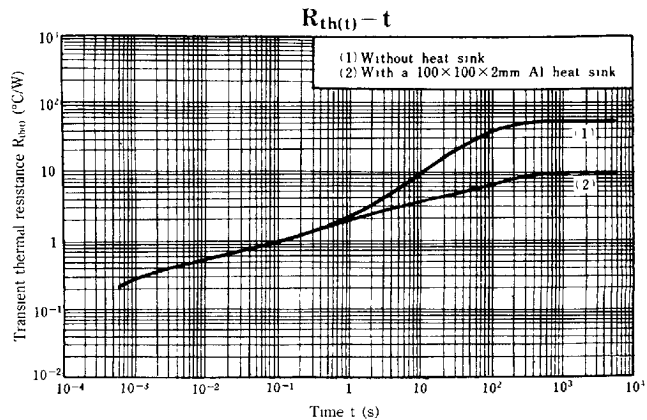
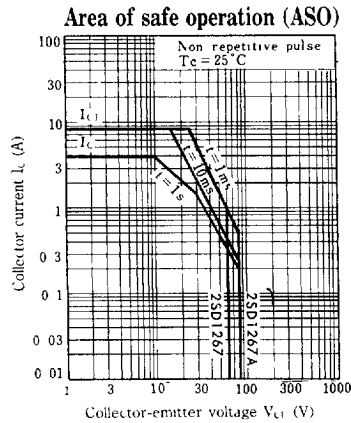
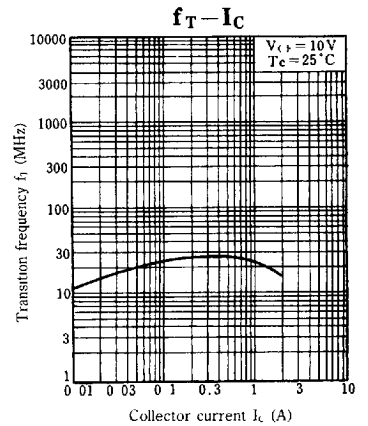
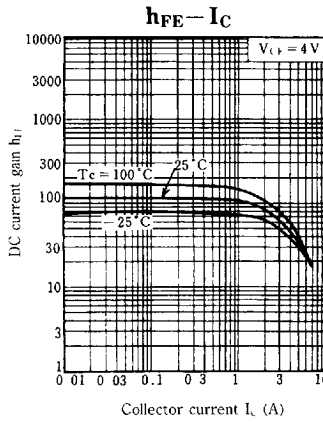
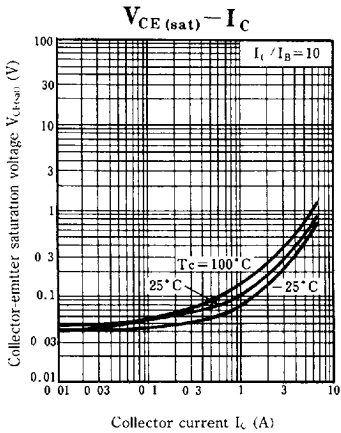
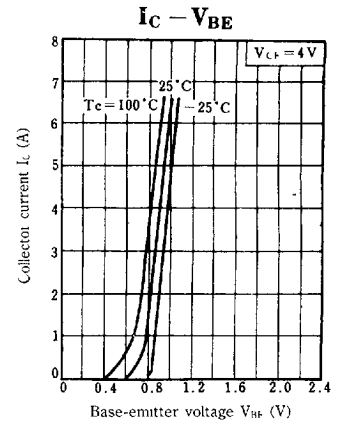
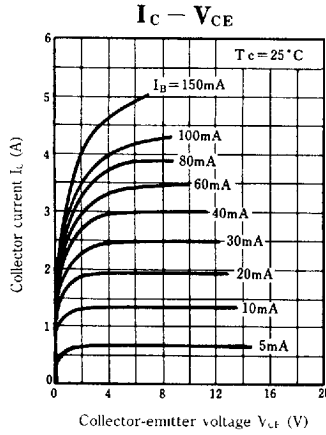
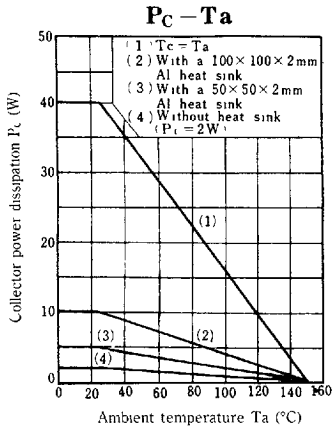
■ Electrical Characteristics ($T_c=25^\circ\text{C}$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	2SD1267 2SD1267A	I_{CES}	$V_{CE}=60\text{ V}, V_{BE}=0$		400	μA
Collector cutoff current	2SD1267 2SD1267A	I_{CEO}	$V_{CE}=80\text{ V}, I_B=0$		700	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=5\text{ V}, I_C=0$			1	mA
Collector-emitter voltage	2SD1267 2SD1267A	V_{CEO}	$I_C=30\text{ mA}, I_B=0$		60	V
					80	
DC current gain		h_{FE1}^*	$V_{CE}=4\text{ V}, I_C=1\text{ A}$	40	250	
		h_{FE2}	$V_{CE}=4\text{ V}, I_C=3\text{ A}$	15		
Base-emitter voltage	V_{BE}	$V_{CE}=4\text{ V}, I_C=3\text{ A}$			2	V
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=4\text{ A}, I_B=0.4\text{ A}$			1.5	V
Transition frequency	f_T	$V_{CE}=5\text{ V}, I_C=0.5\text{ A}, f=1\text{ MHz}$		20		MHz
Turn-on time	t_{on}	$I_C=4\text{ A}, I_{B1}=0.4\text{ A}, I_{B2}=-0.4\text{ A}$ $V_{CC}=50\text{ V}$		0.4		μs
Storage time	t_{stg}			1.2		μs
Fall time	t_f			0.5		μs

* h_{FE1} Classifications

Class	R	Q	P
h_{FE1}	40 ~ 90	70 ~ 150	120 ~ 250

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