

2SD1266, 2SD1266A

Silicon NPN Triple-Diffused Planar Type

Power Amplifier

Complementary Pair with 2SB941, 2SB941A

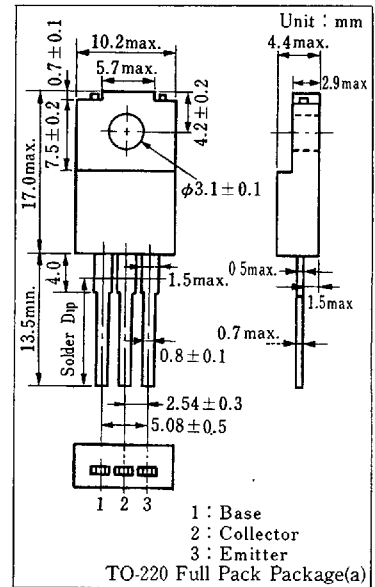
■ Features

- 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	2SD1266	60	V
	2SD1266A	80	
Collector-emitter voltage	2SD1266	60	V
	2SD1266A	80	
Emitter-base voltage	V_{EBO}	6	V
Peak collector current	I_{CP}	5	A
Collector current	I_C	3	A
Collector power dissipation	$T_c=25^\circ\text{C}$	35	W
	$T_a=25^\circ\text{C}$	2	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	$-55 \sim +150$	$^\circ\text{C}$

■ Package Dimensions



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

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	2SD1266	$V_{CE}=60\text{ V}, V_{BE}=0$			200	μA
	2SD1266A	$V_{CE}=80\text{ V}, V_{BE}=0$			200	
Collector cutoff current	2SD1266	$V_{CE}=60\text{ V}, I_B=0$			300	μA
	2SD1266A	$V_{CE}=80\text{ V}, I_B=0$			300	
Emitter cutoff current	I_{EBO}	$V_{EB}=6\text{ V}, I_C=0$			1	mA
Collector-emitter voltage	2SD1266	$I_C=30\text{ mA}, I_B=0$	60			V
	2SD1266A	$I_C=30\text{ mA}, I_B=0$	80			
DC current gain	h_{FE1}^*	$V_{CE}=4\text{ V}, I_C=1\text{ A}$	40		320	
	h_{FE2}	$V_{CE}=4\text{ V}, I_C=3\text{ A}$	10			
Base-emitter voltage	V_{BE}	$V_{CE}=4\text{ V}, I_C=3\text{ A}$			1.8	V
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=3\text{ A}, I_B=0.375\text{ A}$			1.2	V
Transition frequency	f_T	$V_{CE}=10\text{ V}, I_C=0.5\text{ A}, f=10\text{ MHz}$		30		MHz
Turn-on time	t_{on}	$I_C=1\text{ A}, I_{B1}=0.1\text{ A}, I_{B2}=-0.1\text{ A}$ $V_{CC}=50\text{ V}$		0.5		μs
Storage time	t_{stg}			2.5		μs
Fall time	t_f			0.4		μs

* h_{FE1} Classifications

Class	R	Q	P	O
h_{FE1}	40~90	70~150	120~250	160~320

