

# 2SD1273, 2SD1273A

## Silicon NPN Triple-Diffused Planar Type

High DC Current Gain ( $h_{FE}$ ), Power Amplifier

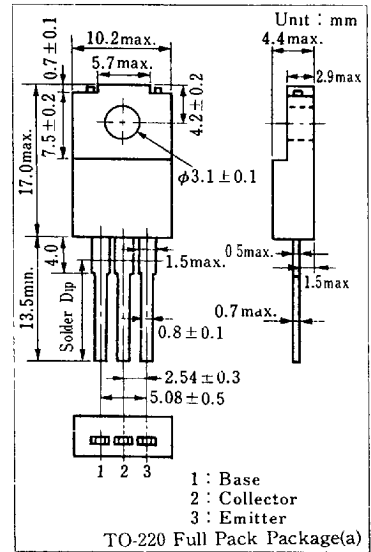
### ■ Features

- High DC current gain ( $h_{FE}$ )
- Good linearity of DC current gain ( $h_{FE}$ )
- "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	2SD1273	80	V
	2SD1273A	100	
Collector-emitter voltage	2SD1273	60	V
	2SD1273A	80	
Emitter-base voltage	$V_{EBO}$	6	V
Peak collector current	$I_{CP}$	6	A
Collector current	$I_C$	3	A
Base current	$I_B$	1	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	2SD1273	$V_{CB} = 80\text{ V}, I_F = 0$			100	$\mu\text{A}$
	2SD1273A	$V_{CB} = 100\text{ V}, I_E = 0$			100	
Collector cutoff current	$I_{CEO}$	$V_{CE} = 40\text{ V}, I_B = 0$			100	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 6\text{ V}, I_C = 0$			100	$\mu\text{A}$
Collector-emitter voltage	2SD1273	$I_C = 25\text{ mA}, I_B = 0$	60			V
	2SD1273A		80			
DC current gain	$h_{FE}^*$	$V_{CE} = 4\text{ V}, I_C = 0.5\text{ A}$	500		2500	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 2\text{ A}, I_B = 0.05\text{ A}$			1	V
Transition frequency	$f_T$	$V_{CE} = 12\text{ V}, I_C = 0.2\text{ A}, f = 10\text{ MHz}$		50		MHz

### \* $h_{FE}$ Classifications

Class	Q	P	O
h11	500 ~ 1000	800 ~ 1500	1200 ~ 2500

■ 6932852 0016676 5T5 ■

