

2SD1274, 2SD1274A, 2SD1274B

Silicon NPN Triple-Diffused Planar Type

Power Amplifier

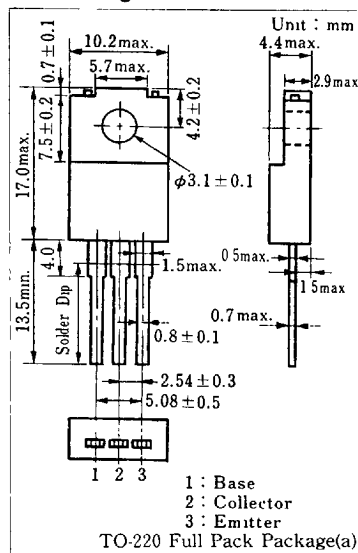
■ Features

- High collector-base voltage (V_{CBO})
- High speed switching
- "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	V_{CBO}	150	V
		200	
		250	
Collector-emitter voltage	V_{CEs}	150	V
		200	
		250	
Collector-emitter voltage	V_{CEO}	80	V
Emitter-base voltage	V_{EB0}	6	V
Collector current	I_C	5	A
Collector power dissipation	P_C	40	W
		2	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	$-55 \sim +150$	$^\circ\text{C}$

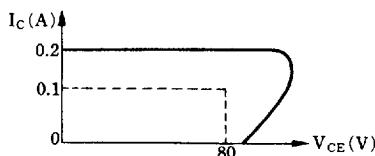
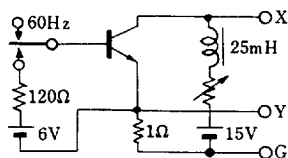
■ Package Dimensions

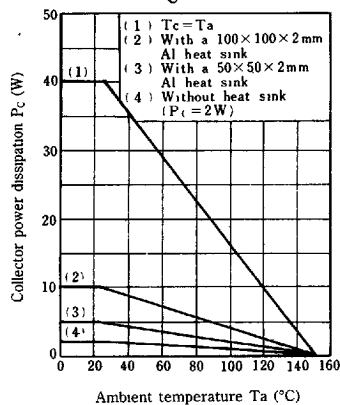
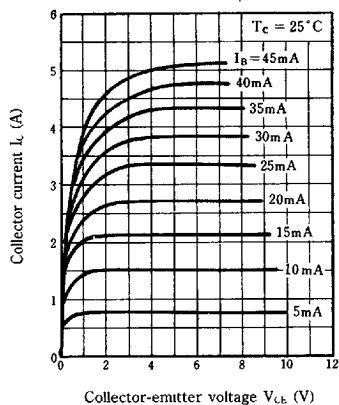
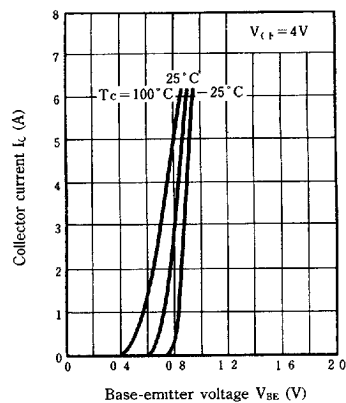
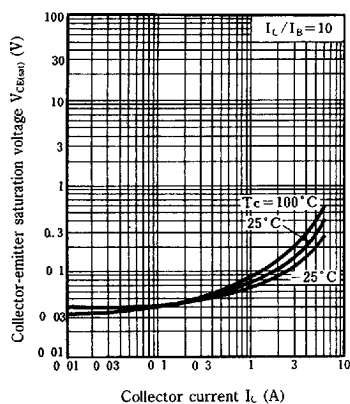
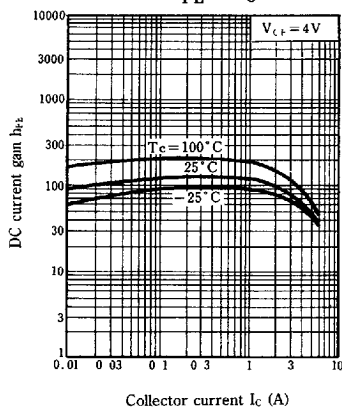
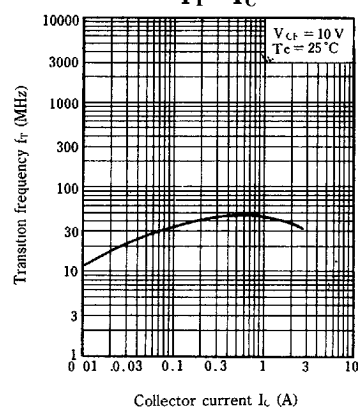
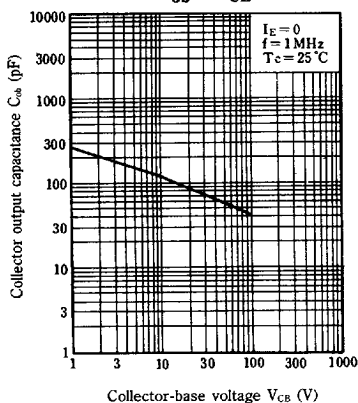
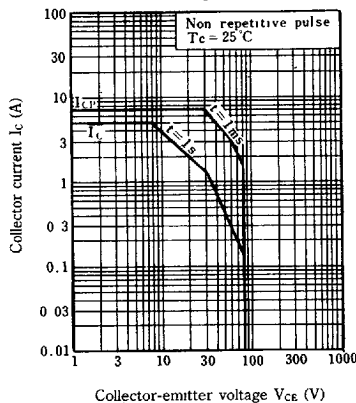
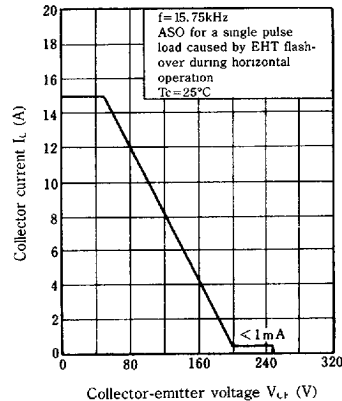


■ Electrical Characteristics ($T_c=25^\circ\text{C}$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CBO}	$V_{CB}=150\text{ V}, I_E=0$			1	mA
		$V_{CB}=200\text{ V}, I_E=0$			1	
		$V_{CB}=250\text{ V}, I_E=0$			1	
Collector-emitter voltage	$V_{CFO(sus)}^*$	$I_C=0.2\text{ A}, L=25\text{ mH}$	80			V
Collector-base voltage	V_{EB0}	$I_E=1\text{ mA}, I_C=0$	6			V
DC current gain	h_{FE}	$V_{CE}=4\text{ V}, I_C=5\text{ A}$	14			
Base-emitter voltage	V_{BE}	$V_{CE}=4\text{ V}, I_C=5\text{ A}$			1.5	V
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=5\text{ A}, I_B=1\text{ A}$			1.6	V
Transition frequency	f_T	$V_{CE}=10\text{ V}, I_C=0.5\text{ A}, f=10\text{ MHz}$		40		MHz
Fall time	t_f	$I_C=5\text{ A}, I_{B1}=0.8\text{ A}, V_{EB}=-5\text{ V}$			1	μs

* $V_{CFO(sus)}$ Test method



P_C—T_a**I_C—V_{CE}****I_C—V_{BE}****V_{CE(sat)}—I_C****h_{FE}—I_C****f_T—I_C****C_{ob}—V_{CB}****Area of safe operation (ASO)****Area of safe operation (ASO)**

Note) Refer to P.672 (on 2SB1271/A) for $R_{th(ja)} - t$ characteristics.