

2SD 1269

Silicon NPN Epitaxial Planar Type

Power Switching

Complementary Pair with 2SB944

■ Features

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

■ Absolute Maximum Ratings (Tc=25°C)

Item		Symbol	Value	Unit
Collector-base voltage		V_{CBO}	130	V
Collector-emitter voltage		V_{CEO}	80	V
Emitter-base voltage		V_{EB0}	7	V
Peak collector current		I_{CP}	8	A
Collector current		I_C	4	A
Collector power dissipation	$T_c = 25^\circ C$	P_C	35	W
	$T_a = 25^\circ C$		2	
Junction temperature		T_j	150	$^\circ C$
Storage temperature		T_{stg}	$-55 \sim +150$	

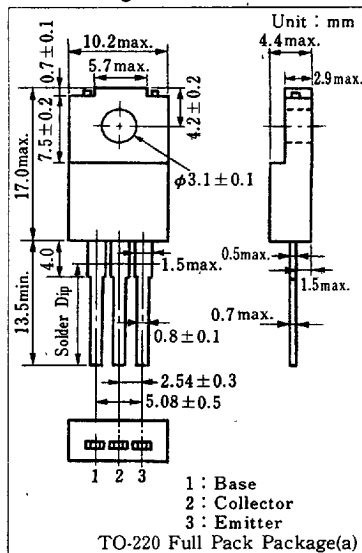
■ Electrical Characteristics (Tc=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CB0}	$V_{CB}=100\text{ V}, I_E=0$			10	μA
Emitter cutoff current	I_{EB0}	$V_{EB}=5\text{ V}, I_C=0$			50	μA
Collector-emitter voltage	V_{CE0}	$I_C=10\text{ mA}, I_B=0$	80			V
DC current gain	h_{FE1}	$V_{CE}=2\text{ V}, I_C=0.1\text{ A}$	45			
	h_{FE2}^*	$V_{CE}=2\text{ V}, I_C=1\text{ A}$	60		260	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=3\text{ A}, I_B=0.15\text{ A}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=3\text{ A}, I_B=0.15\text{ A}$			1.5	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			0.15		μs

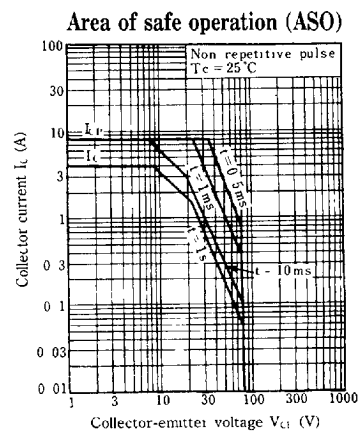
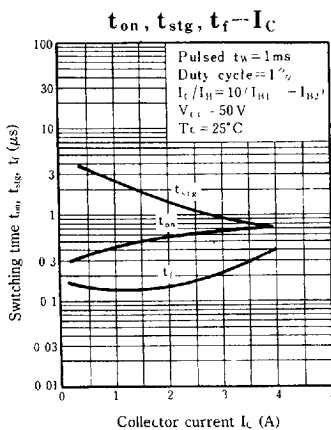
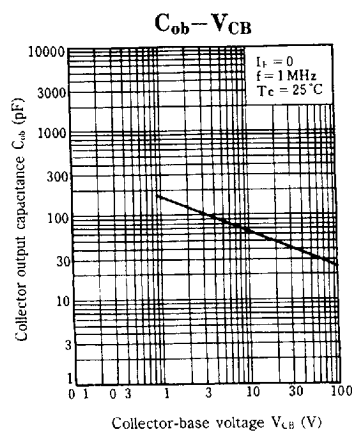
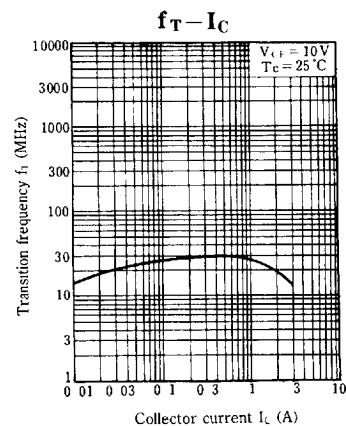
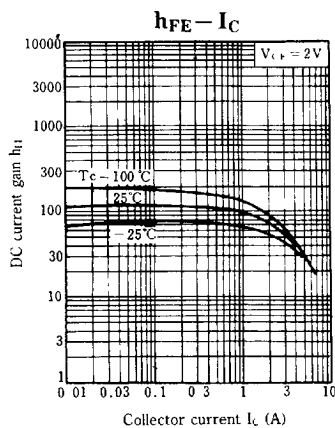
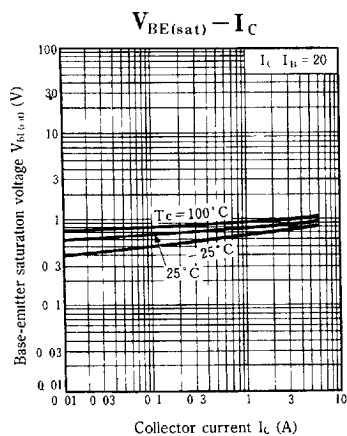
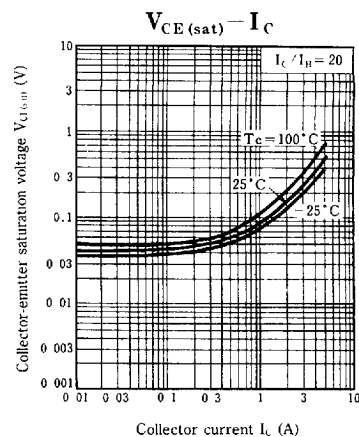
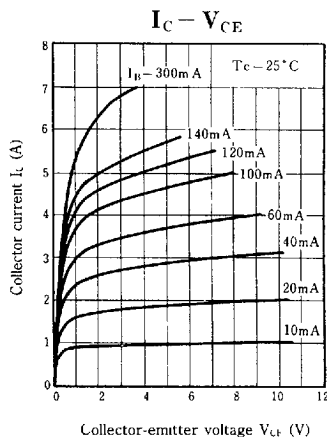
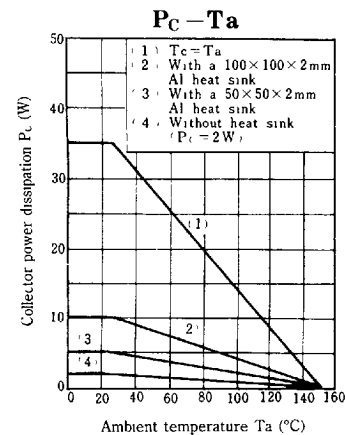
*h_{FE2} Classifications

Class	R	Q	P
h_{Fe2}	60~120	90~180	130~260

■ Package Dimensions



6932852 0016667 592



Note) Refer to P.663 (on 2SD1267/A) for $R_{\theta JA} - t$ characteristics.

6932852 0016668 429

—667—

Panasonic