

2SD1267, 2SD1267A

Silicon NPN triple diffusion planar type

For power amplification

Complementary to 2SB0942 and 2SB0942A

■ Features

- High forward current transfer ratio h_{FE} which has satisfactory linearity
- Low collector to emitter saturation voltage $V_{CE(sat)}$
- Full-pack package which can be installed to the heat sink with one screw

■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

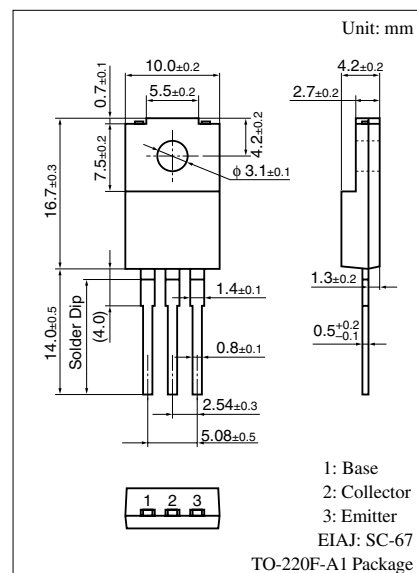
Parameter		Symbol	Rating	Unit
Collector to base voltage	2SD1267	V_{CBO}	60	V
	2SD1267A		80	
Collector to emitter voltage	2SD1267	V_{CEO}	60	V
	2SD1267A		80	
Emitter to base voltage		V_{EBO}	5	V
Peak collector current		I_{CP}	8	A
Collector current		I_C	4	A
Collector power dissipation	$T_C = 25^\circ\text{C}$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

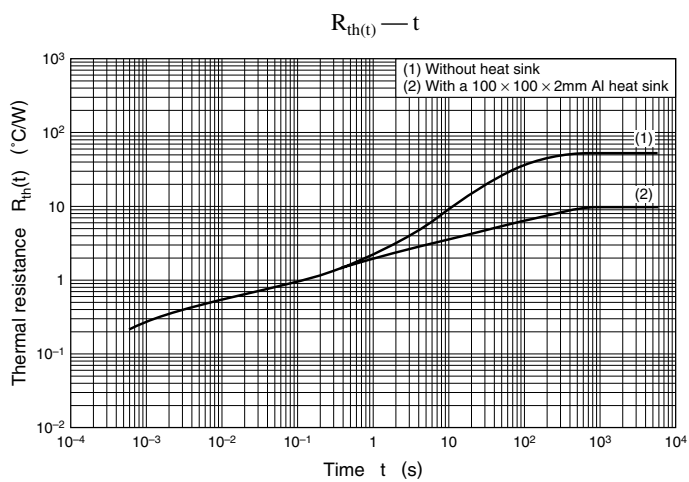
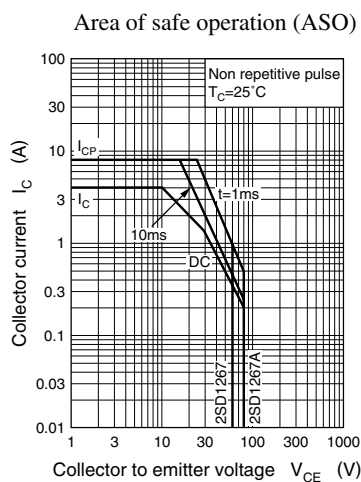
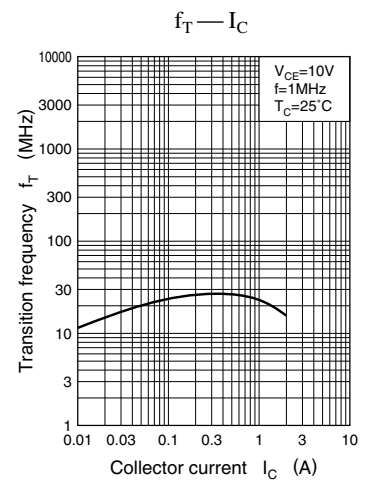
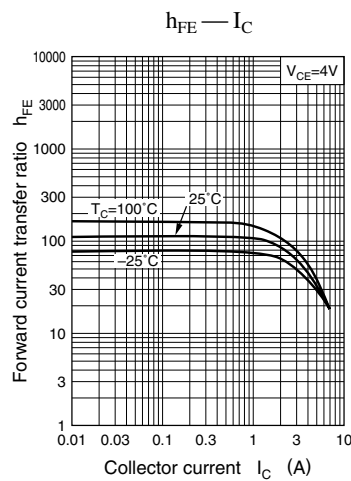
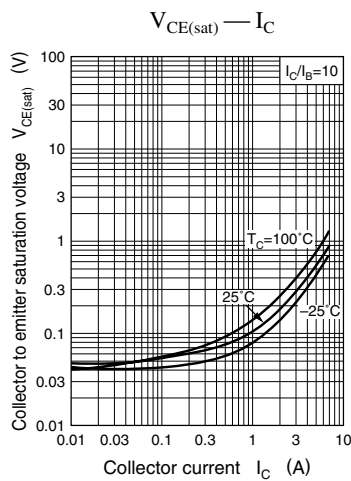
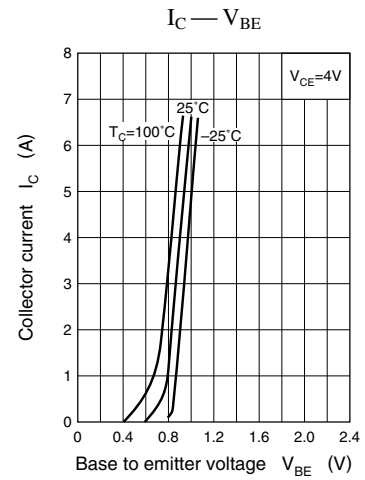
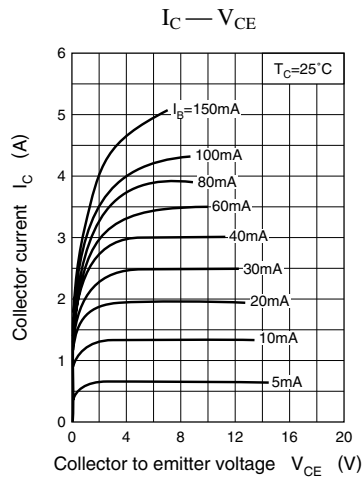
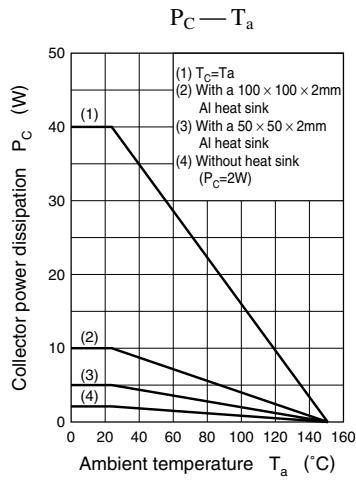
■ Electrical Characteristics $T_C = 25^\circ\text{C}$

Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	2SD1267	I_{CES}	$V_{CB} = 60\text{ V}, V_{BE} = 0$			400	μA
	2SD1267A		$V_{CB} = 80\text{ V}, V_{BE} = 0$			400	
Collector cutoff current	2SD1267	I_{CEO}	$V_{CE} = 30\text{ V}, I_B = 0$			700	μA
	2SD1267A		$V_{CE} = 60\text{ V}, I_B = 0$			700	
Emitter cutoff current		I_{EBO}	$V_{EB} = 5\text{ V}, I_C = 0$			1	mA
Collector to emitter voltage	2SD1267	V_{CEO}	$I_C = 30\text{ mA}, I_B = 0$	60			V
	2SD1267A			80			
Forward current transfer ratio		h_{FE1}^*	$V_{CE} = 4\text{ V}, I_C = 1\text{ A}$	70		250	
		h_{FE2}	$V_{CE} = 4\text{ V}, I_C = 3\text{ A}$	15			
Base to emitter voltage		V_{BE}	$V_{CE} = 4\text{ V}, I_C = 3\text{ A}$			2	V
Collector to 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}			1.5		μs
Fall time		t_f			0.5		μs

Note) *: Rank classification

Rank	Q	P
h_{FE1}	70 to 150	120 to 250





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