

2SD1267, 2SD1267A

Silicon NPN triple diffusion planar type

For power amplification

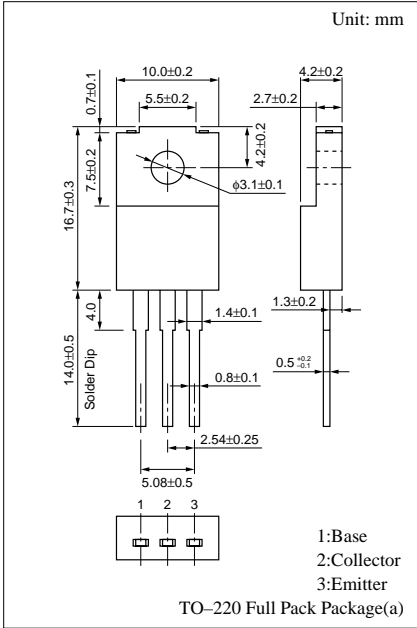
Complementary to 2SB942 and 2SB942A

■ 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	Ratings	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	I_{CES}	2SD1267 $V_{CB} = 60V, V_{BE} = 0$			400	μA
2SD1267A $V_{CB} = 80V, V_{BE} = 0$					400	
Collector cutoff current	I_{CEO}	2SD1267 $V_{CE} = 30V, I_B = 0$			700	μA
2SD1267A $V_{CE} = 60V, I_B = 0$					700	
Emitter cutoff current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			1	mA
Collector to emitter voltage	V_{CEO}	$I_C = 30\text{mA}, I_B = 0$	2SD1267 60			V
2SD1267A 80						
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = 4V, I_C = 1A$	70		250	
	h_{FE2}	$V_{CE} = 4V, I_C = 3A$	15			
Base to emitter voltage	V_{BE}	$V_{CE} = 4V, I_C = 3A$			2	V
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 4A, I_B = 0.4A$			1.5	V
Transition frequency	f_T	$V_{CE} = 5V, I_C = 0.5A, f = 1\text{MHz}$		20		MHz
Turn-on time	t_{on}	$I_C = 4A, I_{B1} = 0.4A, I_{B2} = -0.4A, V_{CC} = 50V$		0.4		μs
Storage time	t_{stg}			1.2		μs
Fall time	t_f			0.5		μs

* h_{FE1} Rank classification

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

