2SB0944 (2SB944)

Silicon PNP epitaxial planar type

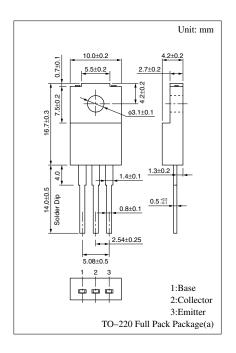
For power switching Complementary to 2SD1269

Features

- ullet Low collector to emitter saturation voltage $V_{\text{CE(sat)}}$
- Satisfactory linearity of foward current transfer ratio h_{FE}
- Large collector current I_C
- Full-pack package which can be installed to the heat sink with one screw

Absolute Maximum Ratings (T_C=25°C)

Parameter		Symbol	Ratings	Unit	
Collector to base voltage		V_{CBO}	-130	V	
Collector to emitter voltage		V_{CEO}	-80	V	
Emitter to base voltage		$V_{\rm EBO}$	-7	V	
Peak collector current		I_{CP}	-8	A	
Collector current		I_{C}	-4	A	
Collector power	T _C =25°C	D	35	***	
dissipation	Ta=25°C	P_{C}	2	W	
Junction temperature		T _j	150	°C	
Storage temperature		T_{stg}	-55 to +150	°C	



Electrical Characteristics (T_C=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -100V, I_E = 0$			-10	μΑ
Emitter cutoff current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-50	μА
Collector to emitter voltage	V _{CEO}	$I_{\rm C} = -10 \text{mA}, I_{\rm B} = 0$	-80			V
Forward current transfer ratio	h _{FE1}	$V_{CE} = -2V, I_C = -0.1A$	45			
	h _{FE2} *	$V_{CE} = -2V, I_{C} = -1A$	90		260	
Collector to emitter saturation voltage	V _{CE(sat)}	$I_C = -3A, I_B = -0.15A$			- 0.5	V
Base to emitter saturation voltage	V _{BE(sat)}	$I_C = -3A, I_B = -0.15A$			-1.5	V
Transition frequency	f_T	$V_{CE} = -10V, I_{C} = -0.5A, f = 10MHz$		30		MHz
Turn-on time	t _{on}			0.15		μs
Storage time	t _{stg}	$I_C = -1A$, $I_{B1} = -0.1A$, $I_{B2} = 0.1A$		0.8		μs
Fall time	$t_{\rm f}$			0.15		μs

*h_{FE2} Rank classification

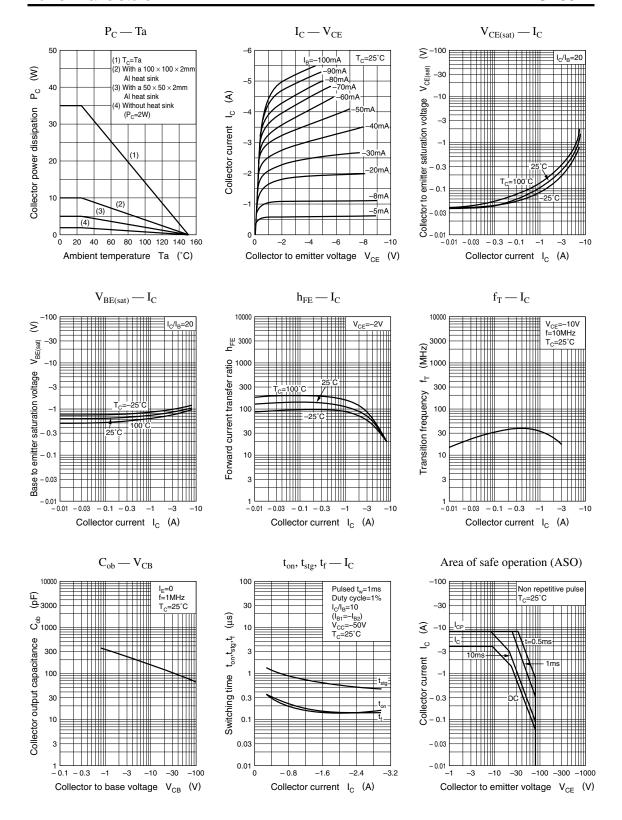
Rank	Q	P
h _{FE2}	90 to 180	130 to 260

Note: Ordering can be made by the common rank (PQ rank $h_{FE2} = 90$ to 260) in the rank classification.

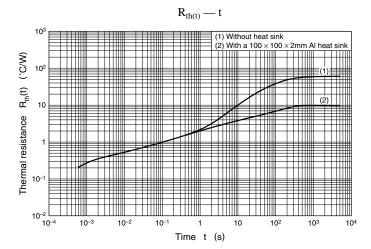
Note.) The Part number in the Parenthesis shows conventional part number.

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Power Transistors 2SB0944



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