

2SD1847

Silicon NPN Triple-Diffused Planar Type

Horizontal Deflection Output

■ Features

- Damper diode built-in
- Minimizes external component counts and simplifies circuitry
- High breakdown voltage, high reliability
- High speed switching
- Wide area of safety operation (ASO)
- "Full Pack" package for simplified mounting on a heat sink with one screw

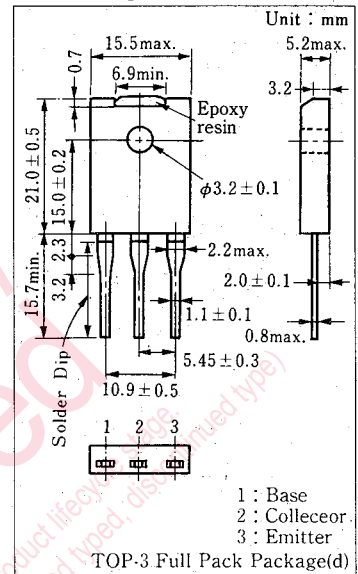
■ Absolute Maximum Ratings (T_c=25°C)

Item	Symbol	Value	Unit	
Collector-base voltage	V _{CB0}	1500	V	
Collector-emitter voltage	V _{CE5}	1500	V	
	V _{CEO}	700	V	
Emitter-base voltage	V _{EBO}	7	V	
Peak collector current	I _{CP}	15	A	
Collector current	I _C	5	A	
Base current	I _B	2	A	
Collector power dissipation	P _C	T _C =25°C	100	W
		T _a =25°C	3	
Junction temperature	T _j	150	°C	
Storage temperature	T _{stg}	-55 ~ +150	°C	

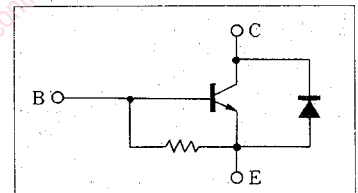
■ Electrical Characteristics (T_c=25°C)

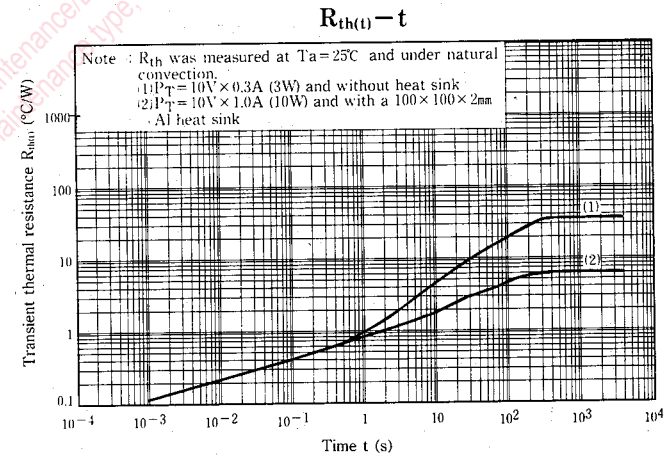
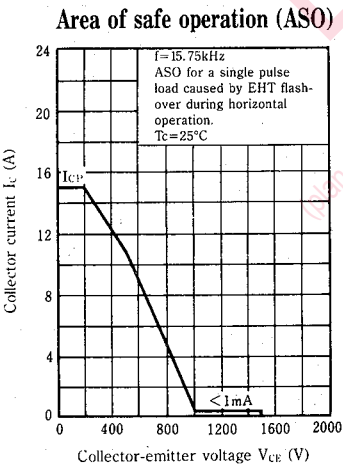
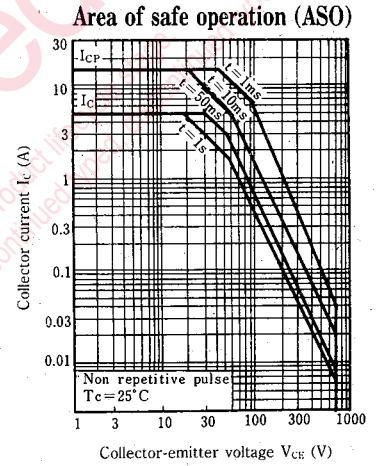
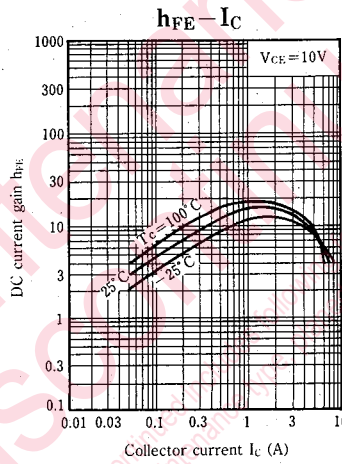
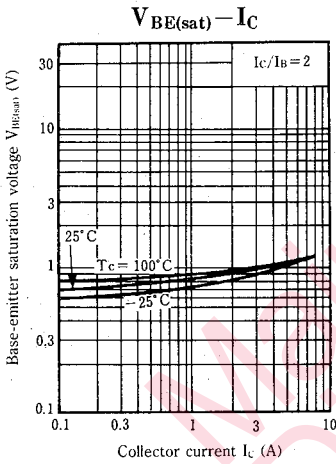
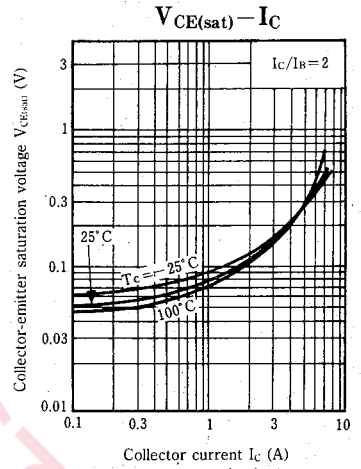
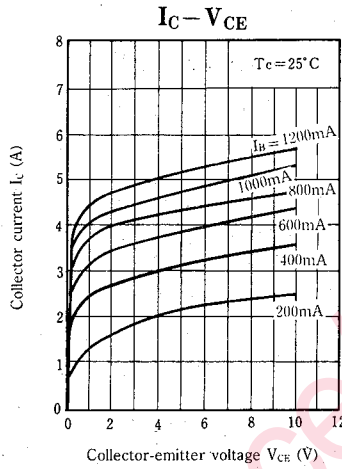
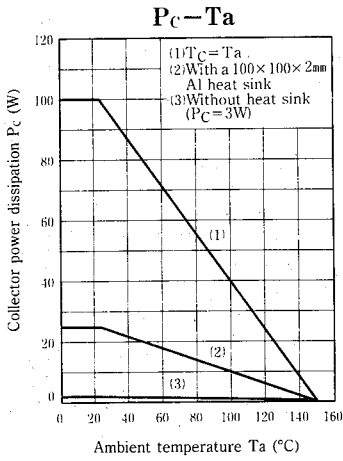
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I _{CB0}	V _{CB} =750V, I _E =0			10	μA
		V _{CB} =1500V, I _F =0			1	mA
Emitter-base voltage	V _{EBO}	I _E =500mA, I _C =0	7			V
DC current gain	h _{FE}	V _{CE} =5V, I _C =1A	5		25	
		V _{CE} =10V, I _C =4A	4			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =4A, I _B =1A			8	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =4A, I _B =1A			1.5	V
Transition frequency	f _T	V _{CE} =10V, I _C =1A, f=0.5MHz		2		MHz
Storage time (L load)	t _{stg}	I _C =4A, I _{B1} =1A			9	μs
Collector current fall time (L load)	t _f	I _{B2} =-1A, L _{leak} =5μH			0.8	μs
Storage time (R load)	t _{stg}	I _C =4A, I _{B1} =1A		1.5		μs
Collector current fall time (R load)	t _f	I _{B2} =-2A, V _{CC} =200V		0.2		μs
Diode forward voltage	V _F	I _C =-5A, I _B =0			2.3	V

■ Package Dimensions



■ Inner Circuit





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