

Driver Applications

- Relay drivers, hammer drivers, lamp drivers, motor drivers

- High DC current gain ($h_{FE} \geq 4000$)
- Large current capacity
- Small and slim package making it easy to make 2SD1800-applied sets smaller

unit.

Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	10	V
Collector Current	I_C	1.5	A
Collector Current(Pulse)	I_{CP}	3	A
Collector Dissipation	P_C	1	W
	$T_c = 25^\circ\text{C}$	10	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

min	typ	max	unit
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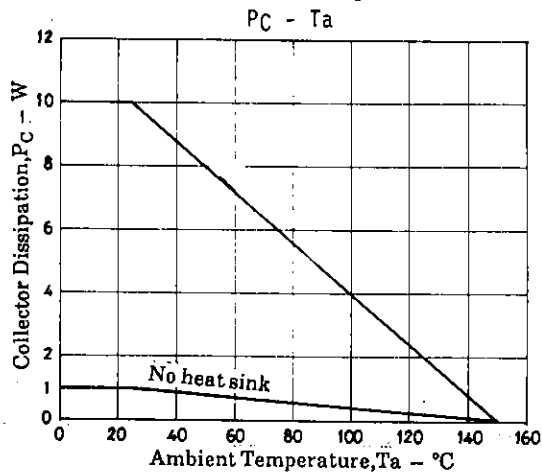
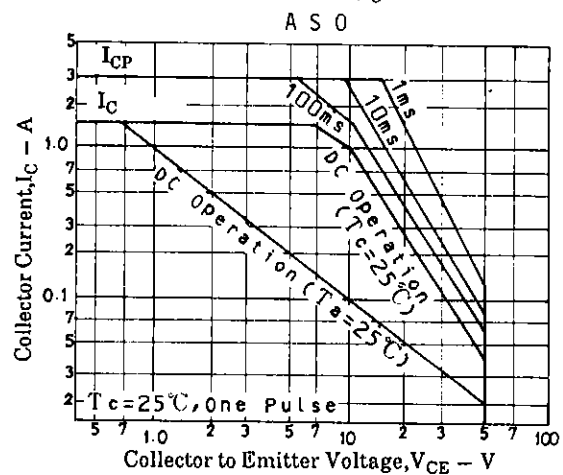
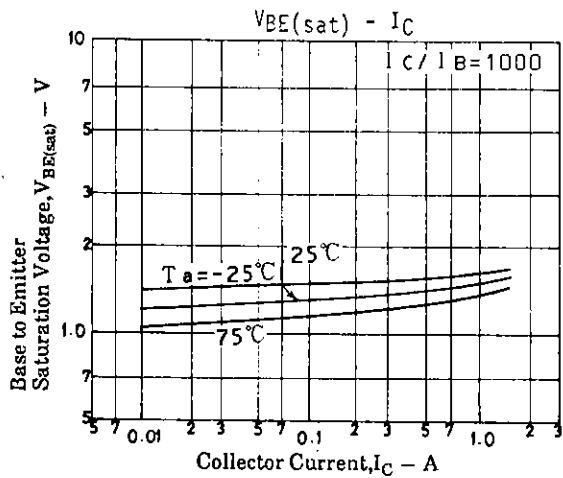
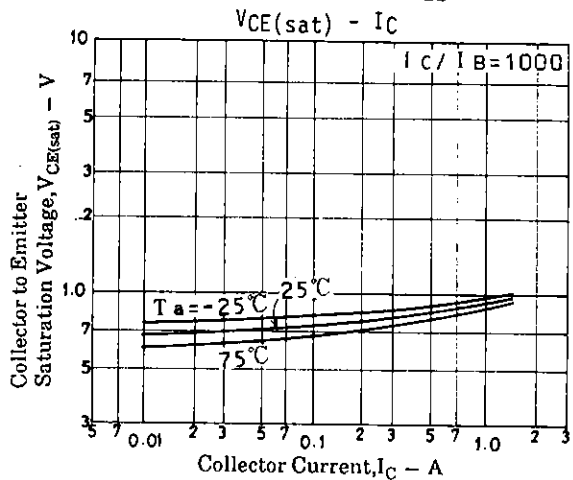
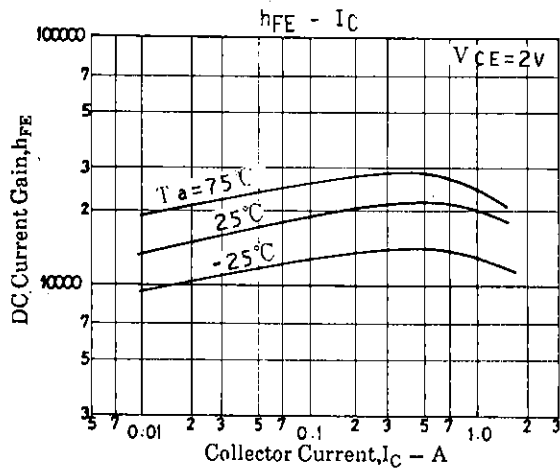
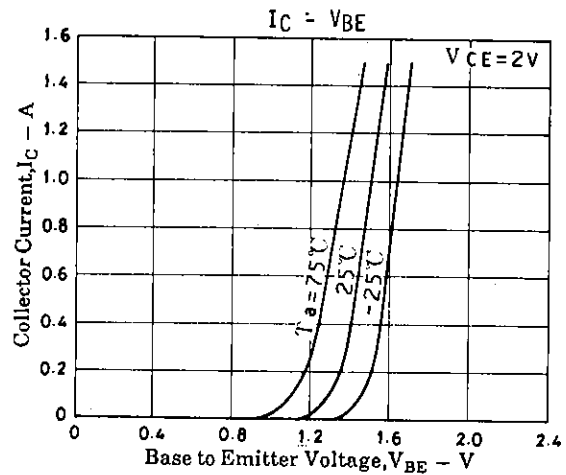
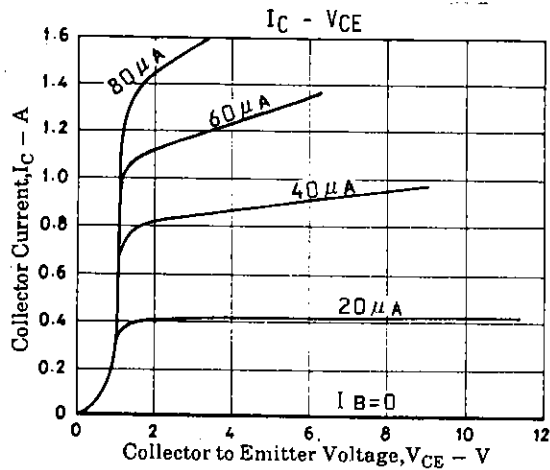
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 40V, I_E = 0$			100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 8V, I_C = 0$			100	nA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = 2V, I_C = 500mA$	4000			
	$h_{FE}(2)$	$V_{CE} = 2V, I_C = 10mA$	3000			
Gain-Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 50mA$		120		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 0.5mA$		0.9	1.5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 500mA, I_B = 0.5mA$		1.5	2.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	80			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	50			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	10			V

1: Base
2: Collector
3: Emitter
4: Collector

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SANYO: TP-FA

8309MO/D156TA.TS No.2111-1/3



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