

SANYO	No. 1594B	2SC3460
NPN Triple Diffused Planar Silicon Transistor FOR SWITCHING REGULATORS		

Features

- . High breakdown voltage and high reliability.
- . Fast switching speed (t_f : 0.1 μ s typ.)
- . Wide ASO.
- . Adoption of MBIT process.

Absolute Maximum Ratings at Ta=25°C

	unit
Collector-to-Base Voltage V_{CBO}	1100 V
Collector-to-Emitter Voltage V_{CEO}	800 V
Emitter-to-Base Voltage V_{EBO}	7 V
Collector Current I_C	6 A
Peak Collector Current i_{cp}	$PW \leq 300\mu s, Duty\ Cycle \leq 10\%$ 20 A
Base Current I_B	3 A
Collector Dissipation P_C	$T_C = 25^\circ C$ 100 W
Junction Temperature T_J	150 °C
Storage Temperature T_{stg}	-55 to +150 °C

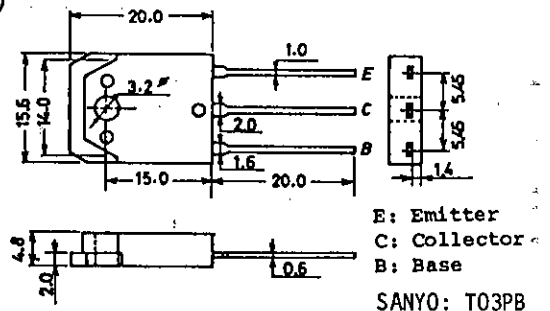
Electrical Characteristics at Ta=25°C

	min	typ	max	unit	
Collector Cutoff Current I_{CBO}			10	μA	
Emitter Cutoff Current I_{EBO}			10	μA	
DC Current Gain $h_{FE(1)}$	10*		40*		
$h_{FE(2)}$	8				
Gain-Bandwidth Product f_T		15		MHz	
Output Capacitance c_{ob}		120		pF	
C-E Saturation Voltage $V_{CE(sat)}$			2.0	V	
B-E Saturation Voltage $V_{BE(sat)}$			1.5	V	
C-B Breakdown Voltage $V(BR)CBO$	1100			V	
C-E Breakdown Voltage $V(BR)CEO$	800			V	
E-B Breakdown Voltage $V(BR)EBO$	7			V	
C-E Sustain Voltage $V_{CEX(sus)}$	800			V	
Turn-On Time t_{on}	$V_{CC} = 400V,$ $5I_{B2} = -2.5I_{B2} = I_C = 4A,$ $R_L = 100\Omega$			0.5	μs
Storage Time t_{stg}				3.0	μs
Fall Time t_f				0.3	μs

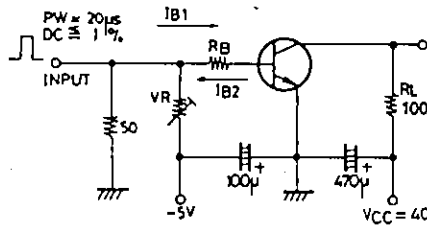
*: The $h_{FE(1)}$ of the 2SC3460 is classified as follows. When specifying the $h_{FE(1)}$ rank, specify two ranks or more in principle.

10	K	20	15	L	30	20	M	40
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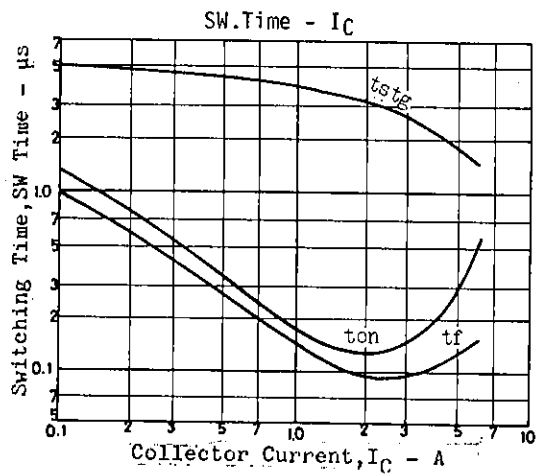
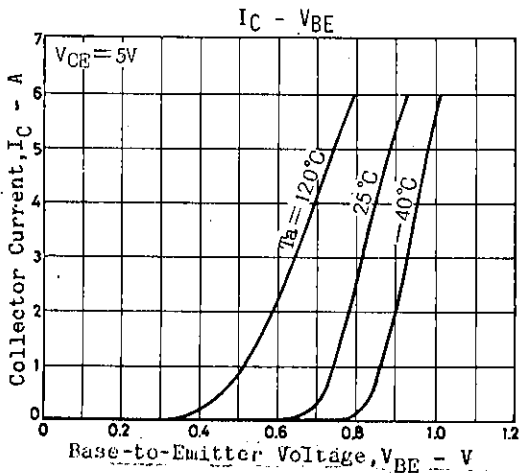
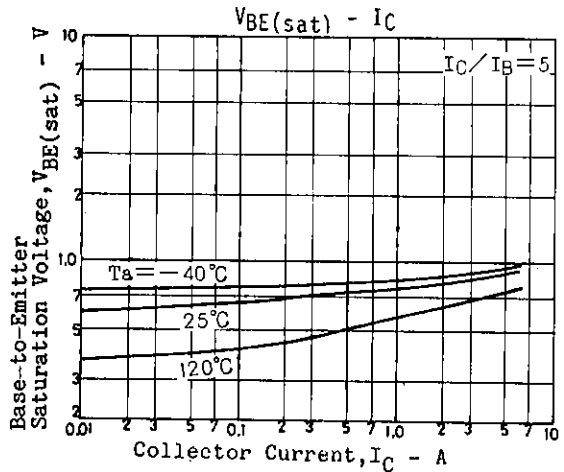
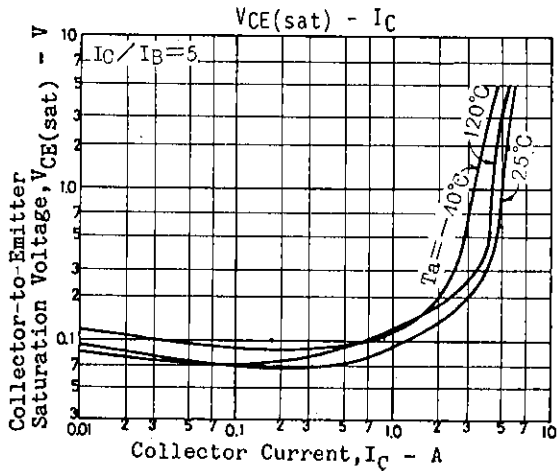
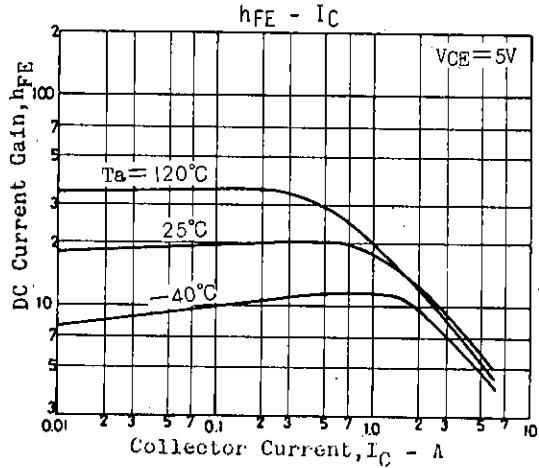
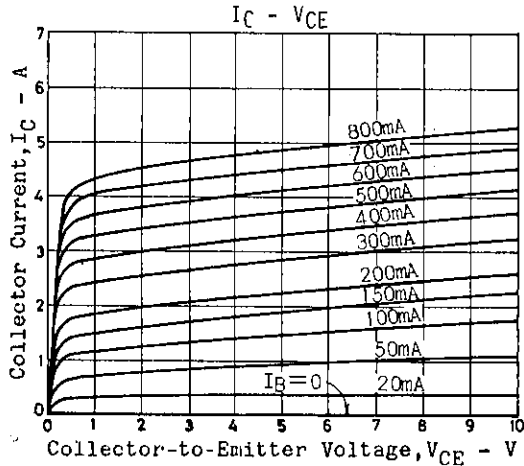
Package Dimensions 2022
(unit:mm)

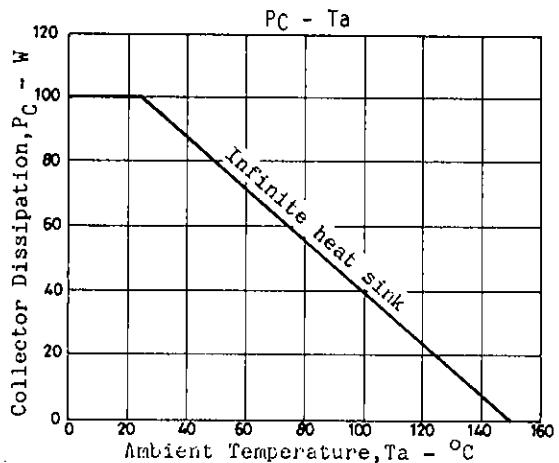
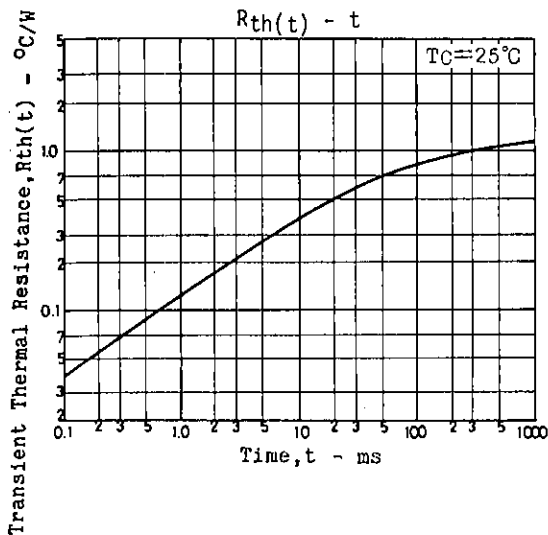
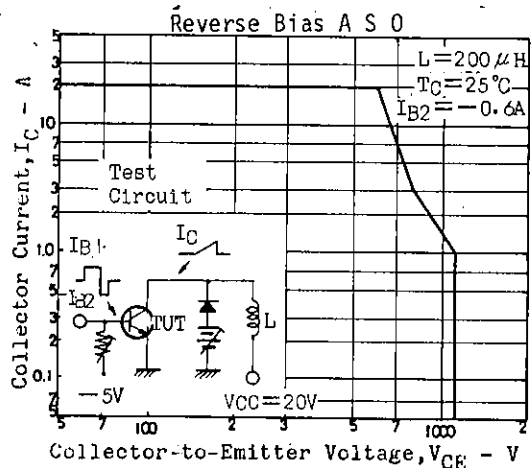
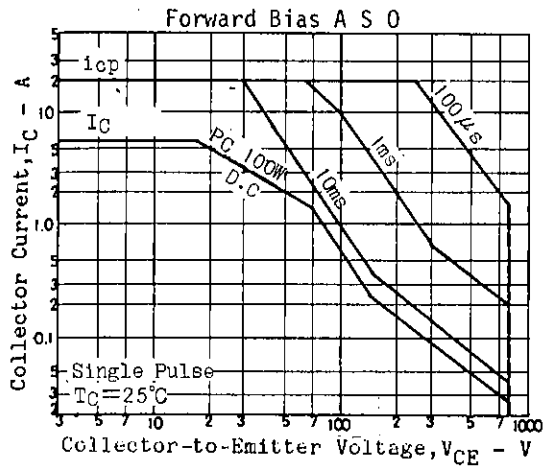


Switching Time Test Circuit



Unit (Resistance : Ω, Capacitance : F)





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