

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

**Features**

- . High breakdown voltage and high reliability.
- . Fast switching speed ( $t_f$ : 0.1 $\mu$ 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

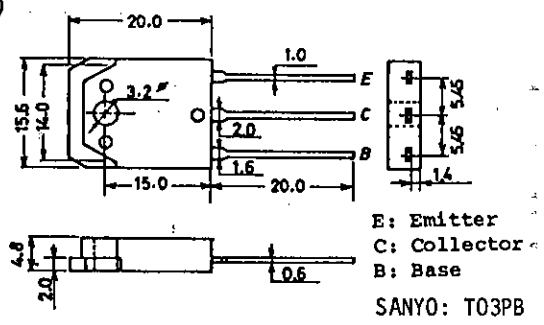
**Electrical Characteristics at Ta=25°C**

	min	typ	max	unit	
Collector Cutoff Current $I_{CBO}$			10	$\mu A$	
Emitter Cutoff Current $I_{EBO}$			10	$\mu A$	
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	$\mu s$
Storage Time $t_{stg}$				3.0	$\mu s$
Fall Time $t_f$				0.3	$\mu s$

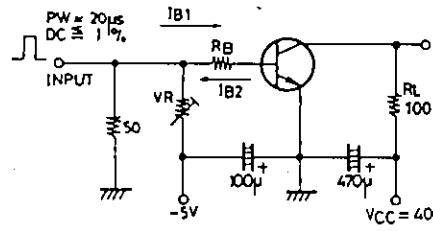
\*: The  $h_{FE(1)}$  of the 2SC3460 is classified as follows. When specifying the  $h_{FE(1)}$  rank, specify two ranks or more in principle.

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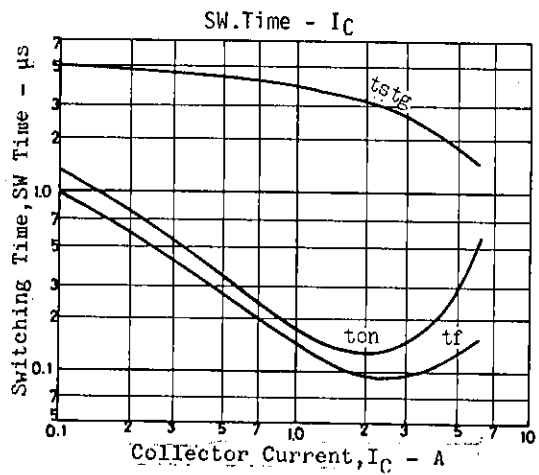
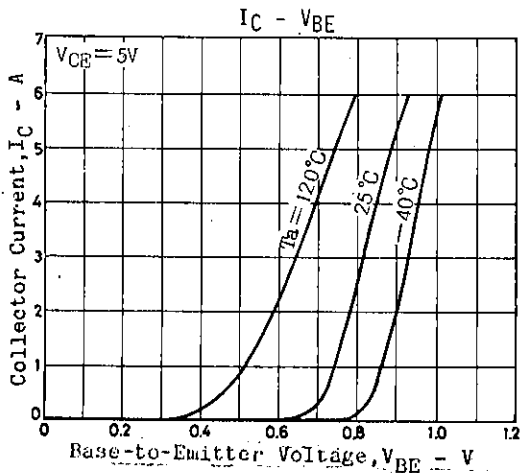
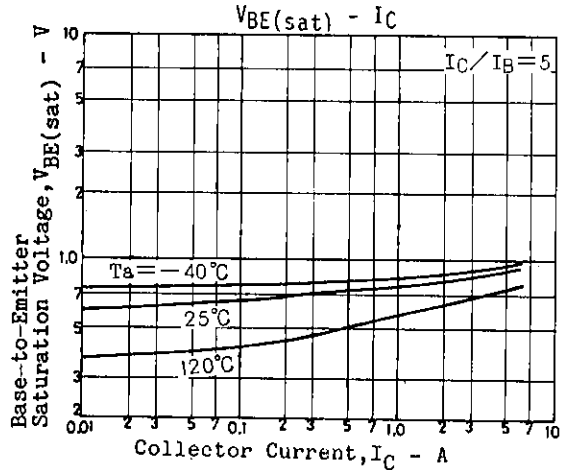
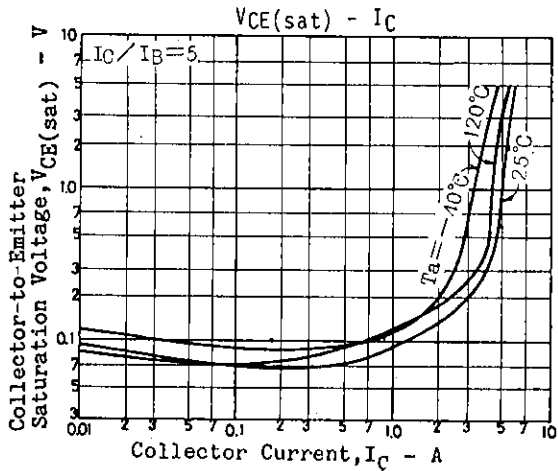
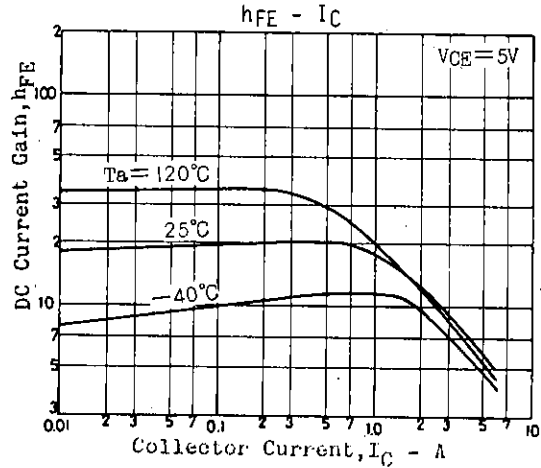
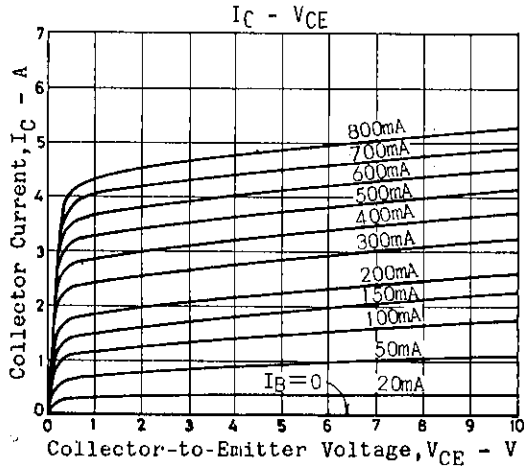
**Package Dimensions 2022**  
(unit:mm)

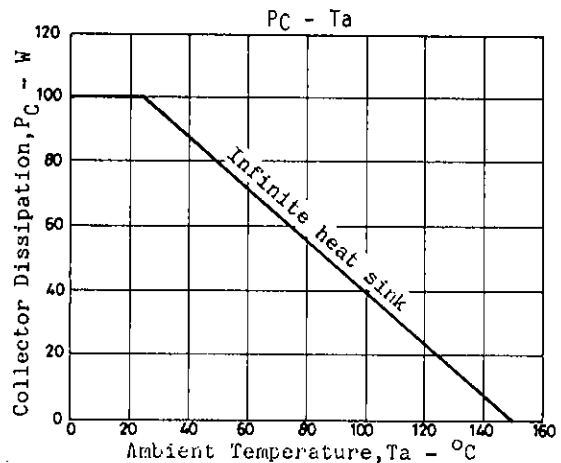
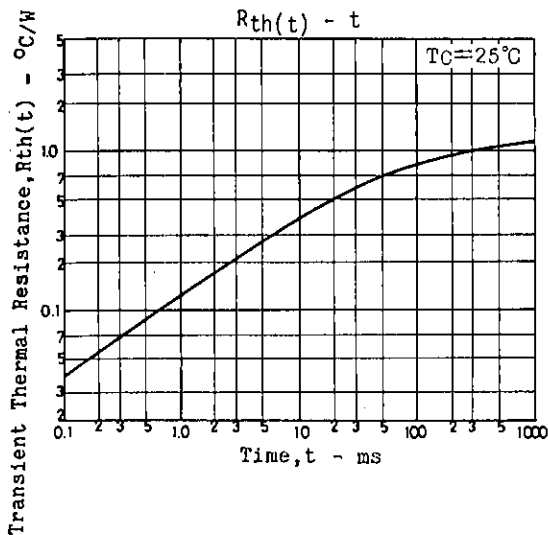
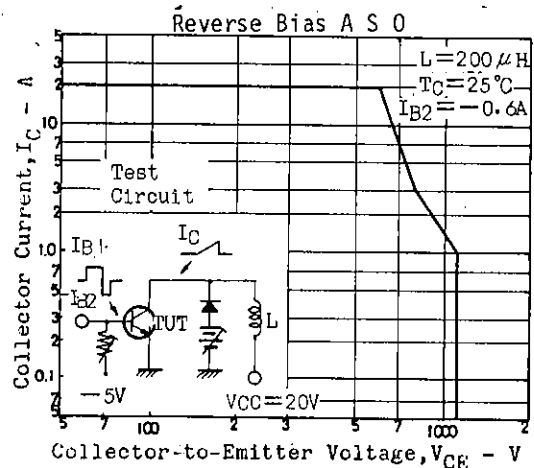
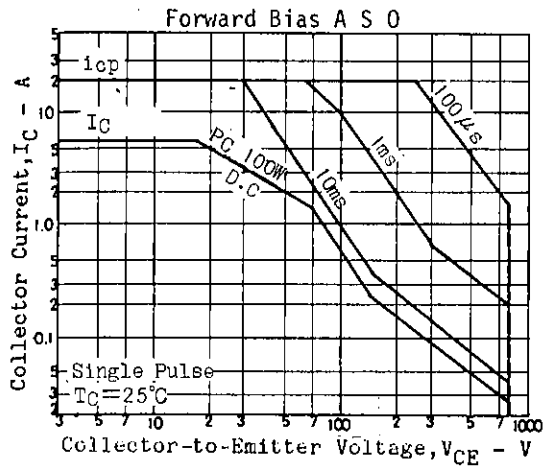


Switching Time Test Circuit



VCC = 400V Unit (Resistance : Ω, Capacitance : F)





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