

<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	$i_{cp}$	20 A
Base Current	$I_B$	3 A
Collector Dissipation	$P_C$	100 W
Junction Temperature	$T_J$	150 °C
Storage Temperature	$T_{stg}$	-55 to +150 °C

$T_C=25^\circ C$

$PW \leq 300\mu s, Duty\ Cycle \leq 10\%$

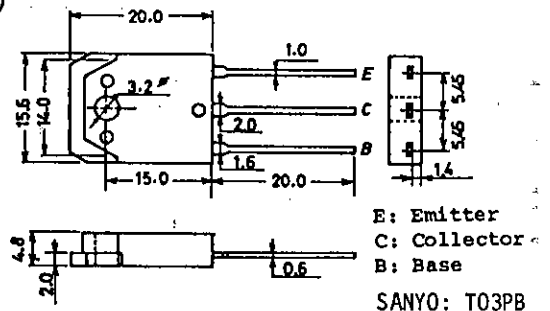
**Electrical Characteristics at Ta=25°C**

		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

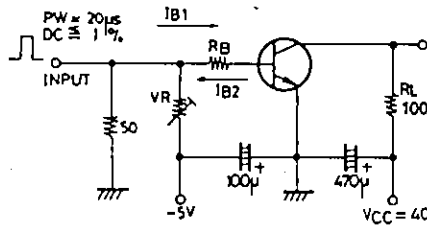
\*: The  $h_{FE(1)}$  of the 2SC3460 is classified as follows. When specifying the  $h_{FE(1)}$  rank, specify two ranks or more in principle.

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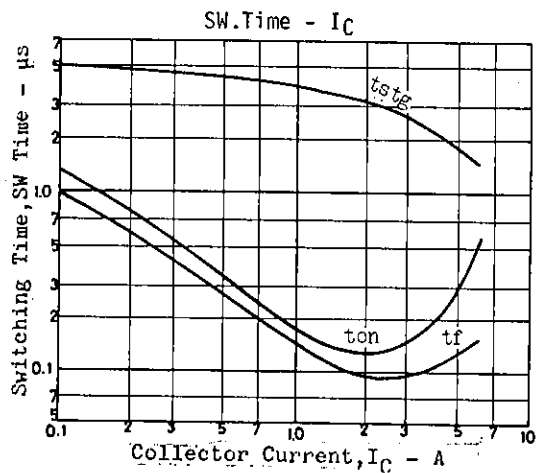
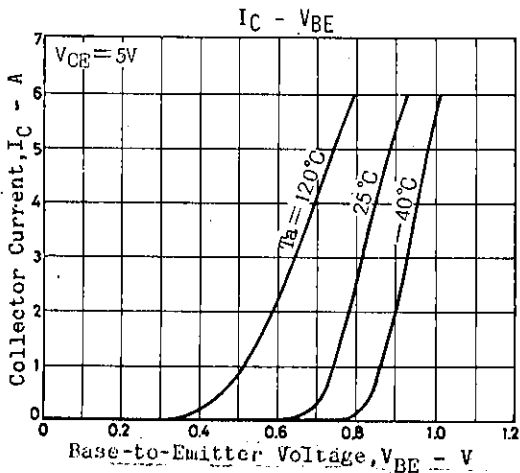
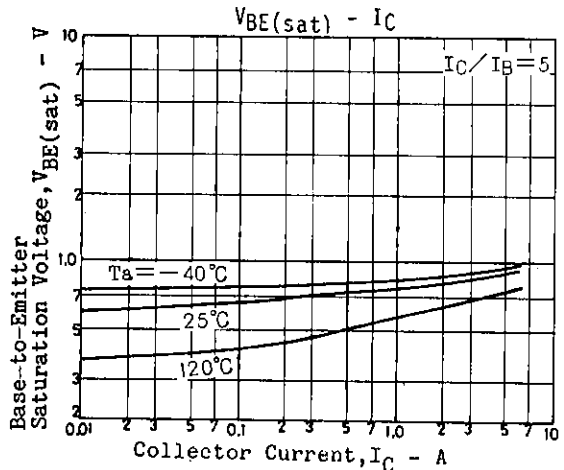
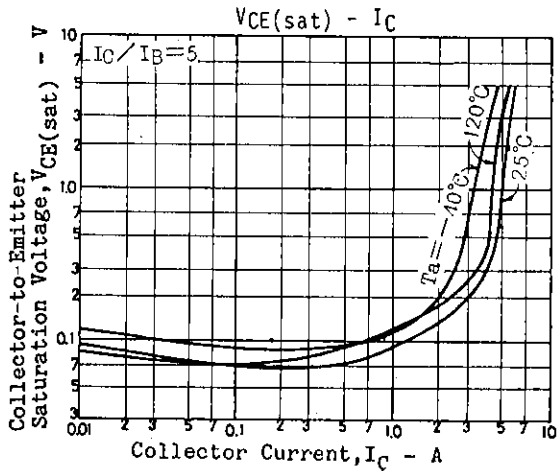
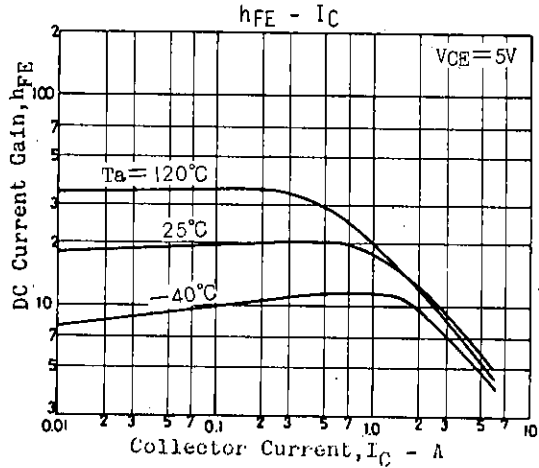
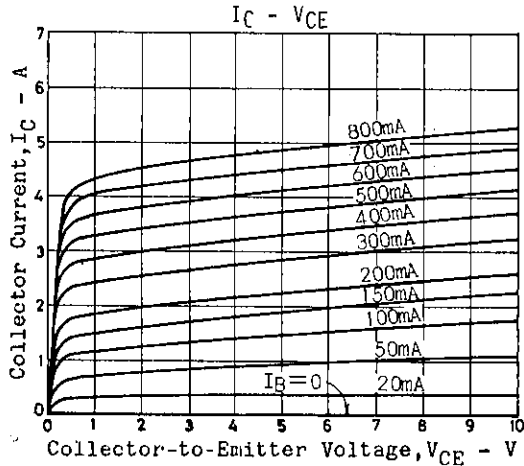
**Package Dimensions 2022**  
(unit:mm)

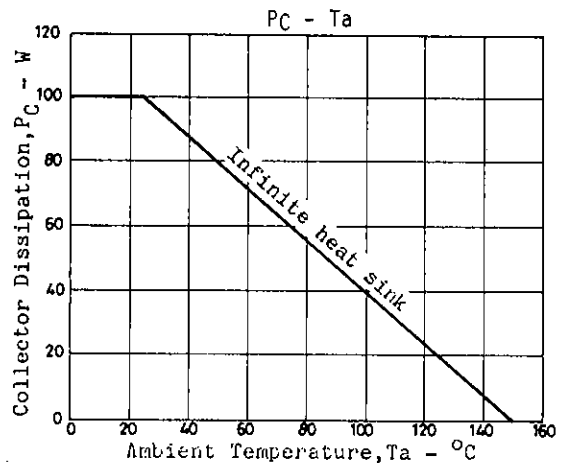
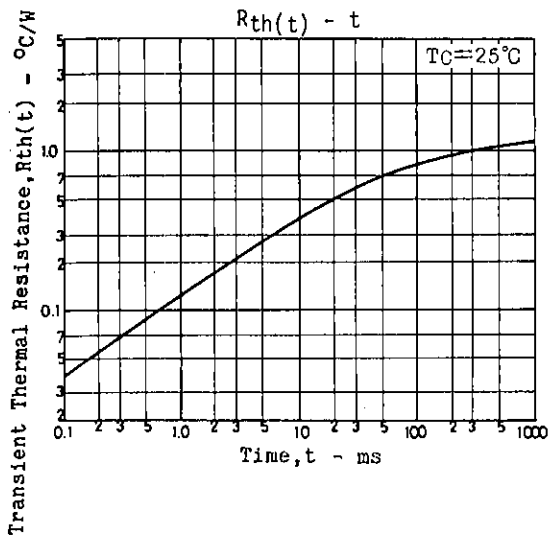
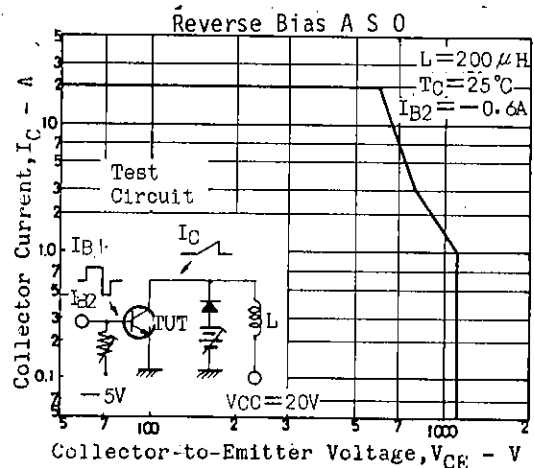
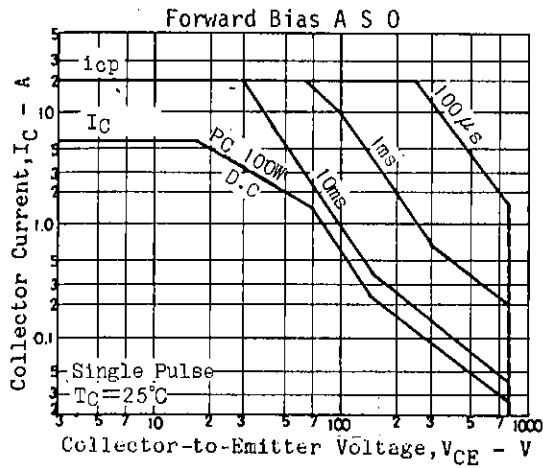


Switching Time Test Circuit



$V_{CC} = 400V$  Unit (Resistance :  $\Omega$ , Capacitance : F)





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