

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 _{CB0}	1100	V
Collector-to-Emitter Voltage	V _{CE0}	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

$T_C=25^\circ\text{C}$
 $PW \leq 300\mu\text{s}, \text{Duty Cycle} \leq 10\%$

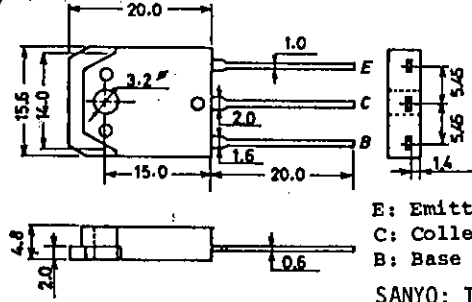
Electrical Characteristics at Ta=25°C

			min	typ	max	
Collector Cutoff Current	I _{CB0}	V _{CB} =800V, I _E =0			10	μ A
Emitter Cutoff Current	I _{EBO}	V _{EB} =5V, I _C =0			10	μ A
DC Current Gain	h _{FE} (1)	V _{CE} =5V, I _C =0.4A	10*		40*	
	h _{FE} (2)	V _{CE} =5V, I _C =2A	8			
Gain-Bandwidth Product	f _T	V _{CE} =10V, I _C =0.4A		15		MHz
Output Capacitance	c _{ob}	V _{CB} =10V, f=1MHz		120		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C =3A, I _B =0.6A			2.0	V
B-E Saturation Voltage	V _{BE(sat)}	I _C =3A, I _B =0.6A			1.5	V
C-B Breakdown Voltage	V(BR)CBO	I _C =1mA, I _E =0	1100			V
C-E Breakdown Voltage	V(BR)CEO	I _C =5mA, R _{BE} =∞	800			V
E-B Breakdown Voltage	V(BR)EBO	I _E =1mA, I _C =0	7			V
C-E Sustain Voltage	V _{CEX(sus)}	I _C =3A, I _{B1} =-I _{B2} =0.6A, L=1mH, clamped	800			V
Turn-On Time	t _{on}	$V_{CC}=400V,$ $5I_{B2}=-2.5I_{B2}=I_C=4A,$ $R_L=100\text{ohms}$			0.5	μ s
Storage Time	t _{stg}				3.0	μ s
Fall Time	t _f				0.3	μ s

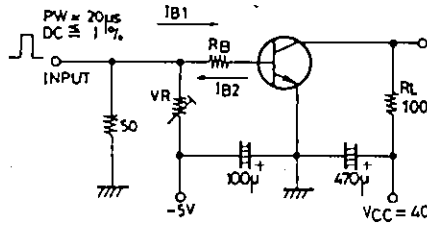
*: The h_{FE}(1) of the 2SC3460 is classified as follows. When specifying the h_{FE}(1) rank, specify two ranks or more in principle.

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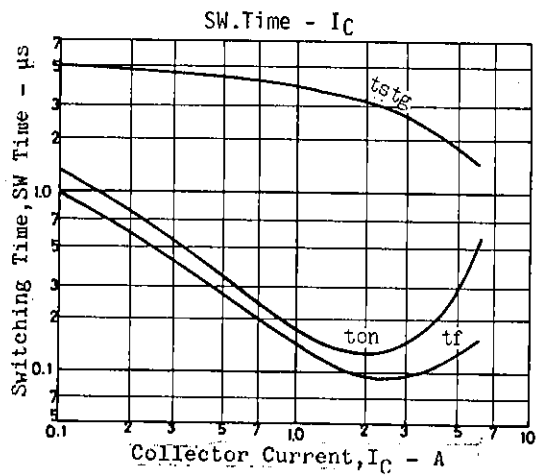
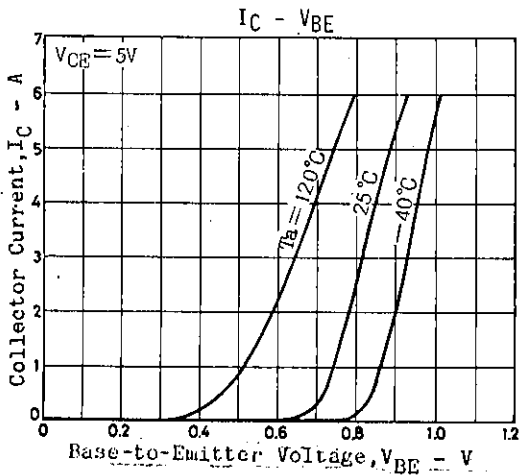
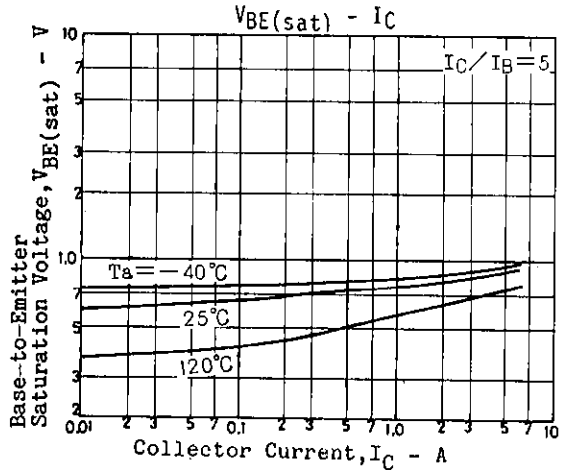
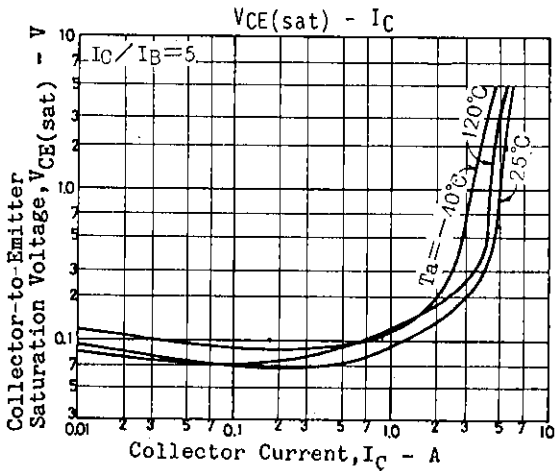
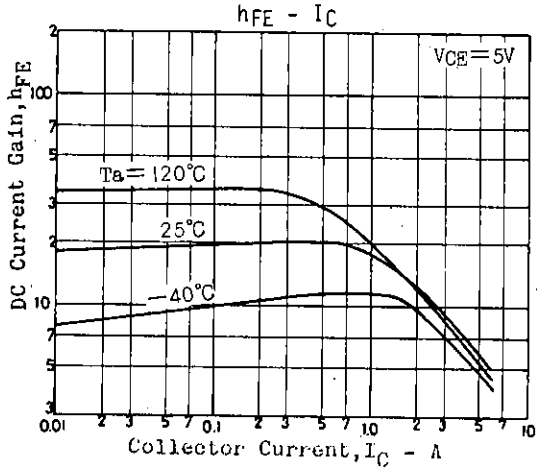
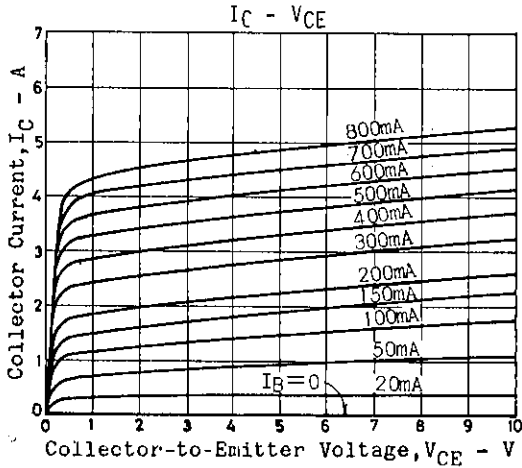
Package Dimensions 2022
(unit:mm)

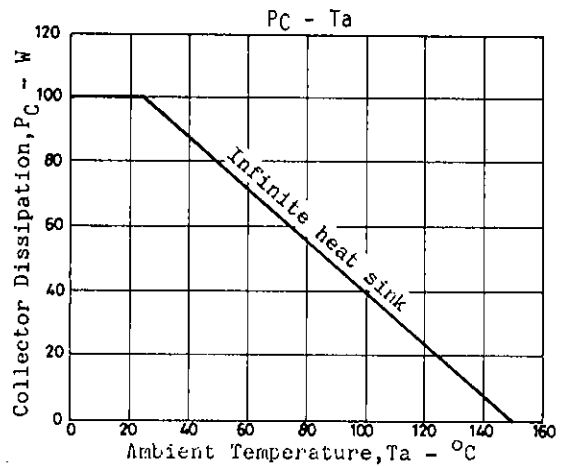
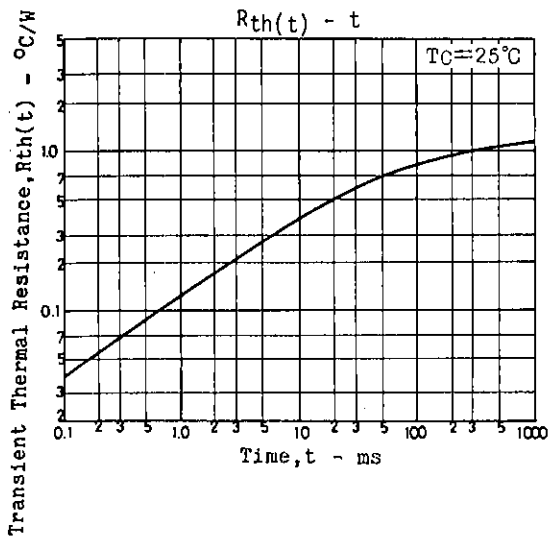
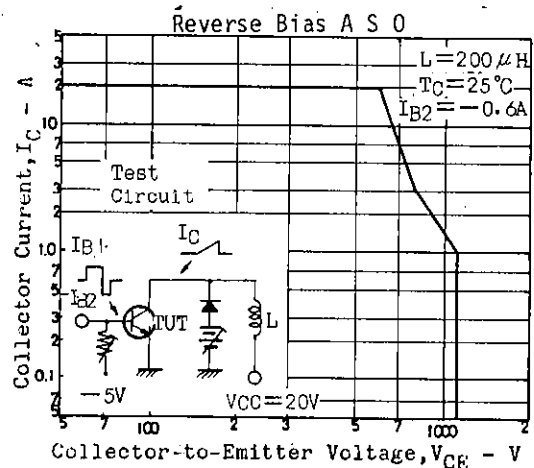
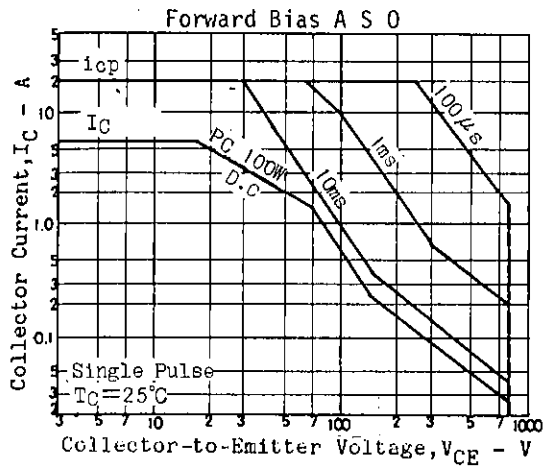


Switching Time Test Circuit



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





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