

<b>SANYO</b>	No. 1597C	<b>2SC3552</b>
NPN Triple Diffused Planar Type 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	$I_C$	12	A
Peak Collector Current	$i_{cp}$	30	A
Base Current	$I_B$	6	A
Collector Dissipation	$P_C$	150	W
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55 to +150	°C

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

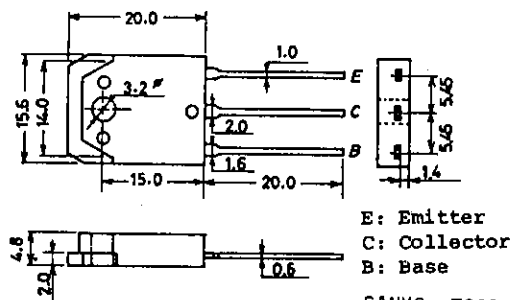
**Electrical Characteristics at Ta=25°C**

		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	$c_{ob}$		215		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	$t_{on}$	$V_{CC} = 400V,$ $5I_{B1} = -2.5I_{B2} = I_C = 8A,$ $R_L = 500\Omega$			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 2SC3552 is classified as follows. When specifying the  $h_{FE}(1)$  rank, specify two ranks or more in principle.

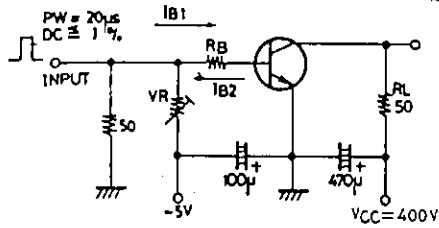
10. K	20	15. L	30	20. M	40
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**Package Dimensions 2022**  
(unit:mm)

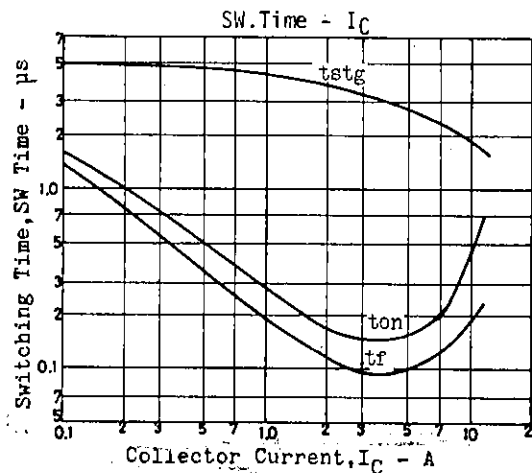
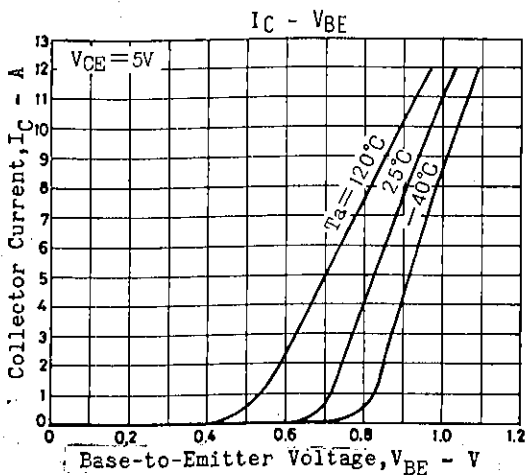
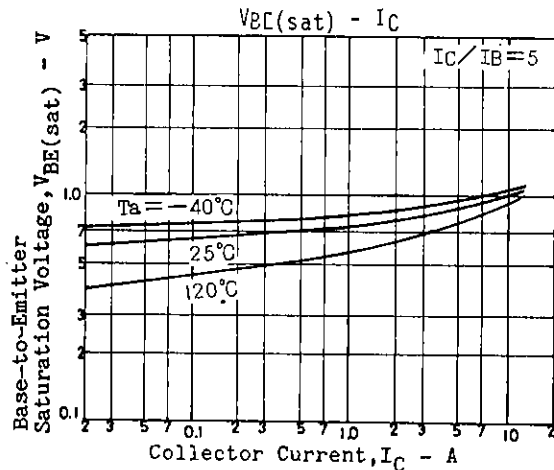
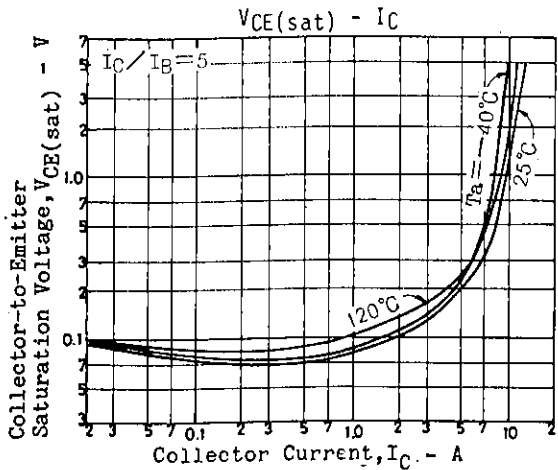
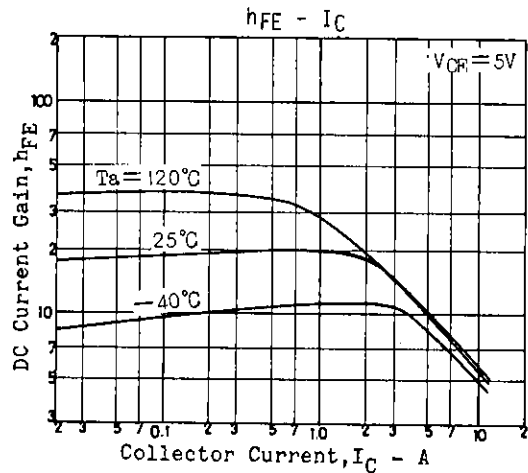
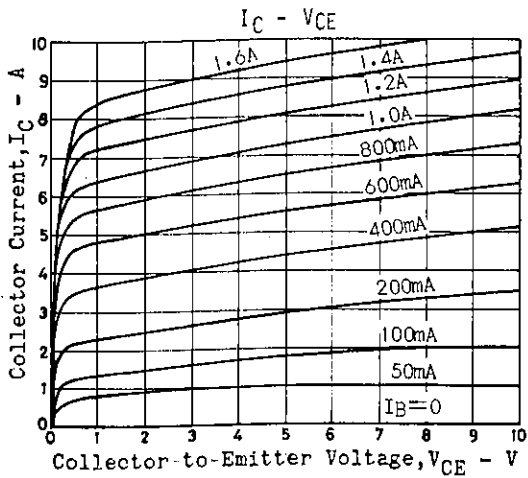


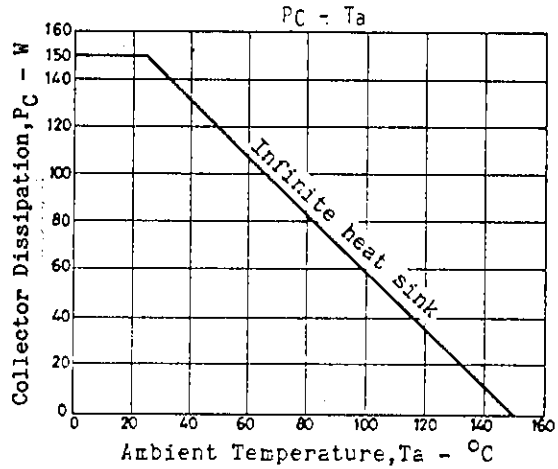
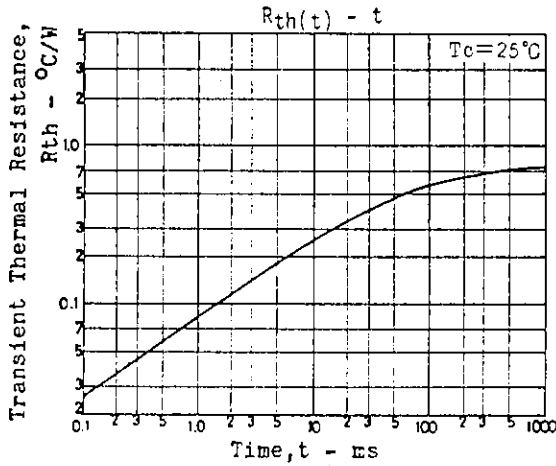
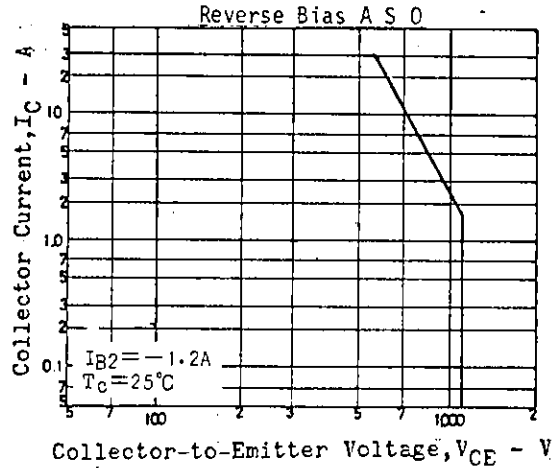
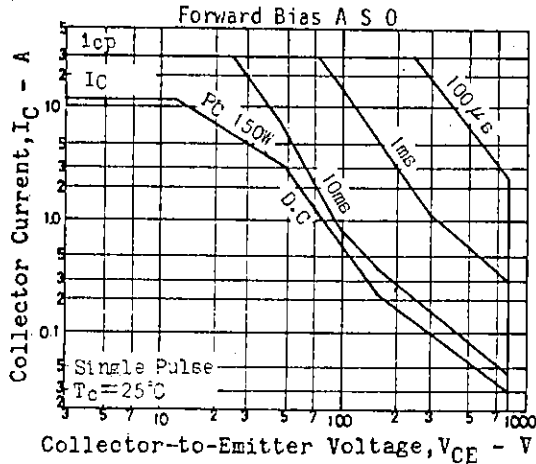
E: Emitter  
C: Collector  
B: Base  
SANYO: TQ3PB

Switching Time Test Circuit



Unit (Resistance : Ω, Capacitance : F)





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