

**SANYO**

No.3101

**2SC4450**

NPN Triple Diffused Planar Silicon Transistor

High-Voltage Switching Applications

**Features**

- High breakdown voltage
- Small  $c_{ob}$
- Wide ASO
- High reliability (Adoption of HVP process)

**Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

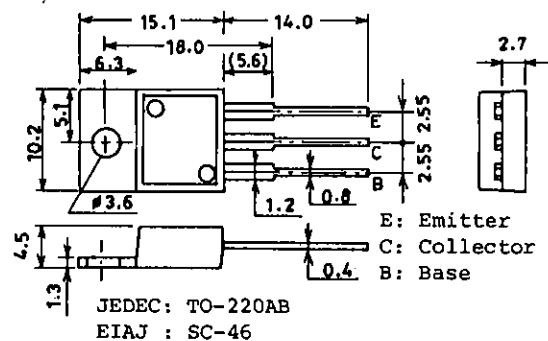
			unit
Collector-to-Base Voltage	$V_{CBO}$	1500	V
Collector-to-Emitter Voltage	$V_{CEO}$	1500	V
Emitter-to-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	5	mA
Peak Collector Current	$i_{cp}$	15	mA
Collector Dissipation	$P_C$	1.75	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

**Electrical Characteristics at  $T_a = 25^\circ\text{C}$** 

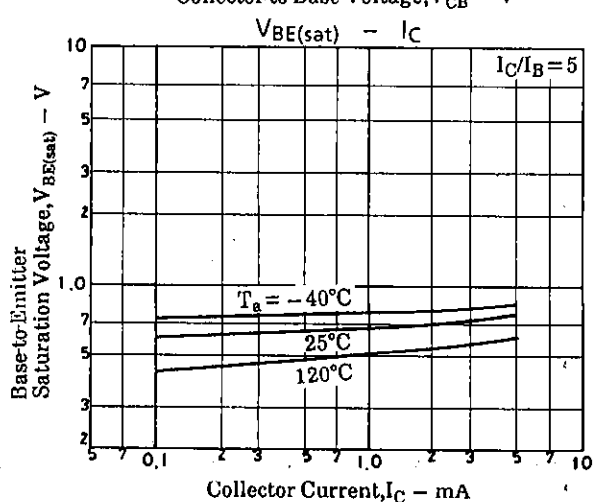
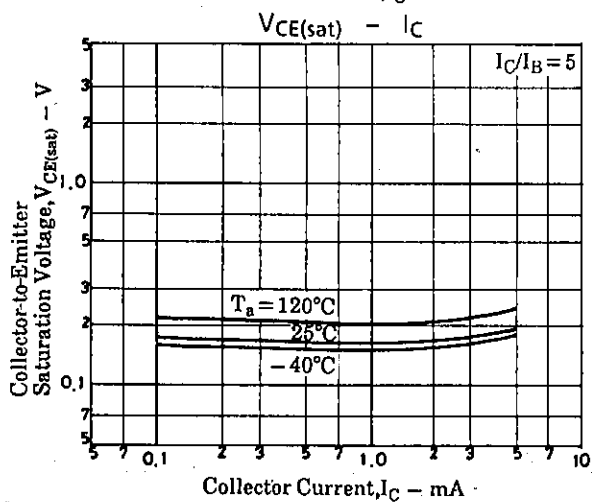
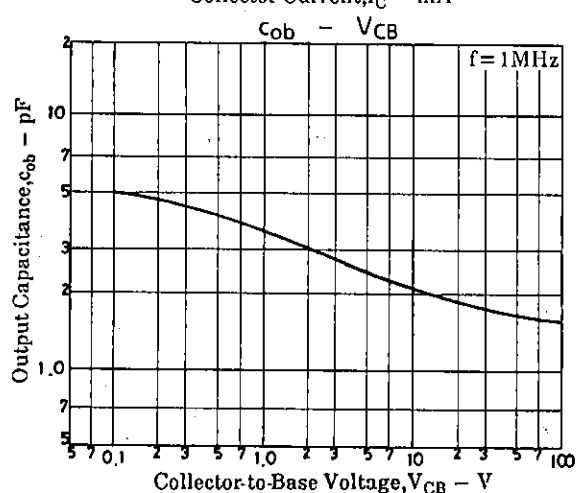
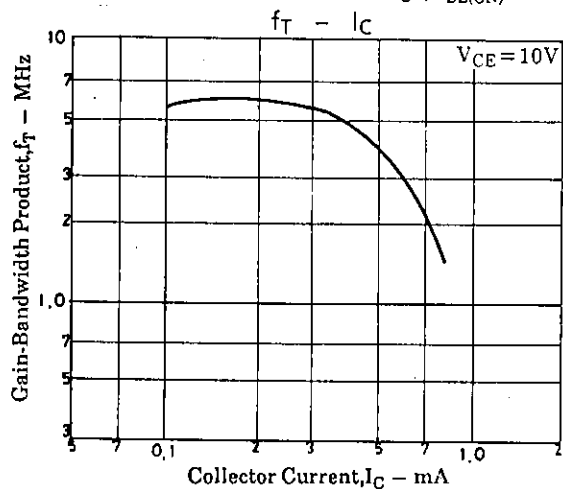
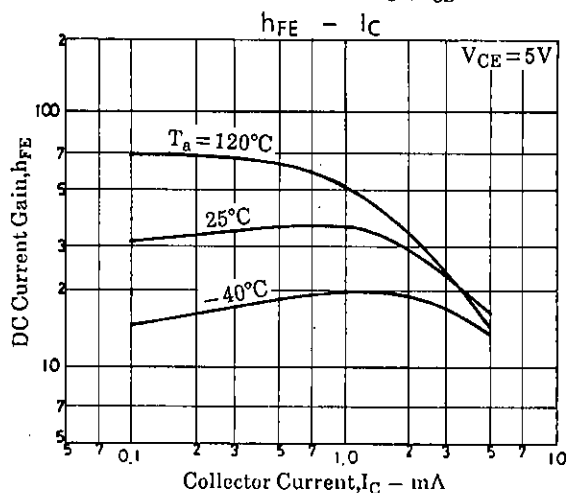
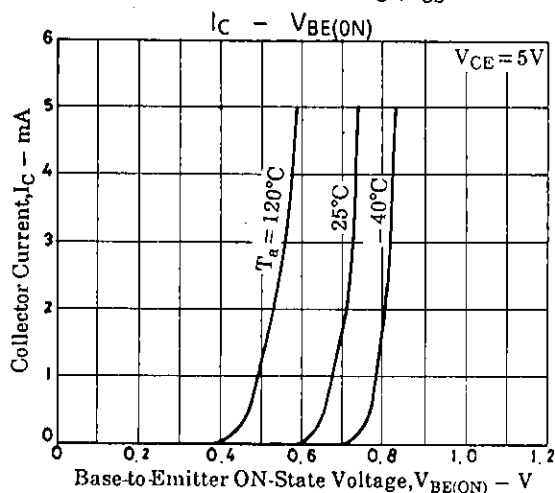
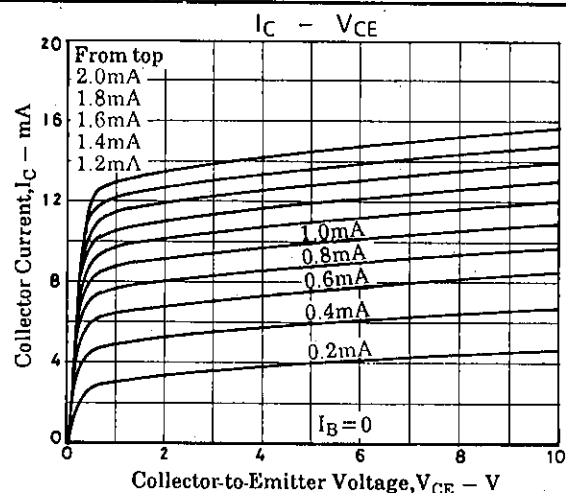
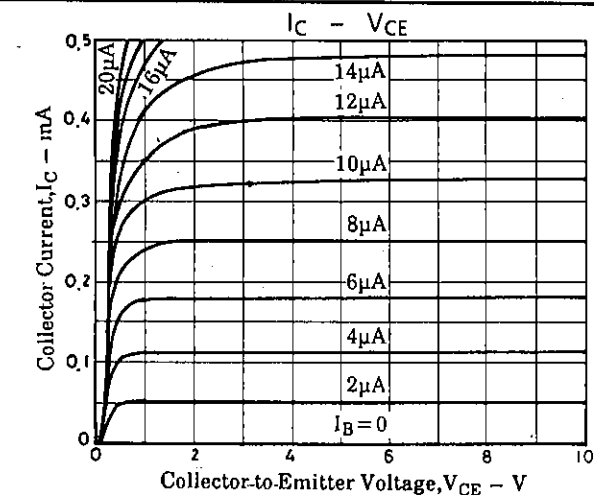
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 1500\text{V}, I_E = 0$			1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 4\text{V}, I_C = 0$			1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE} = 5\text{V}, I_C = 200\mu\text{A}$	10		60	
Gain-Bandwidth Product	$f_T$	$V_{CE} = 10\text{V}, I_C = 200\mu\text{A}$		6		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 500\mu\text{A}, I_B = 100\mu\text{A}$			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 500\mu\text{A}, I_B = 100\mu\text{A}$			2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	1500			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 100\mu\text{A}, R_{BE} = \infty$	1500			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}, I_C = 0$	5			V
Output Capacitance	$c_{ob}$	$V_{CB} = 100\text{V}, f = 1\text{MHz}$		1.5		pF

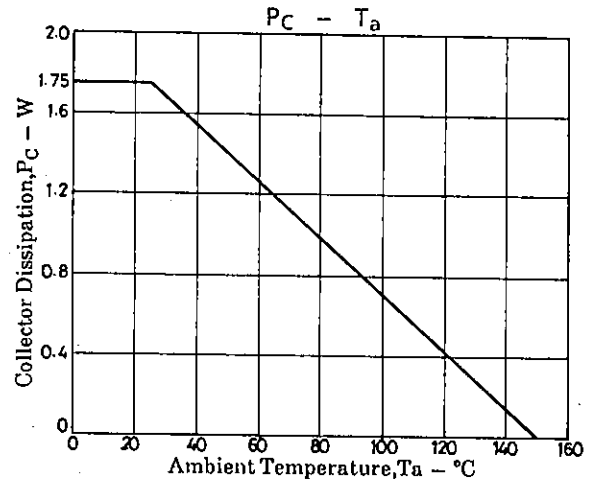
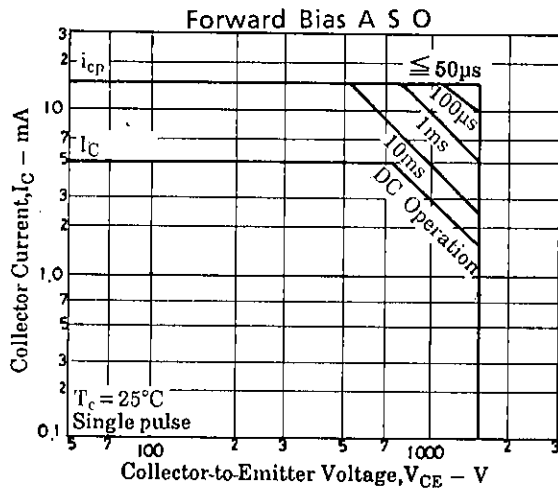
**Package Dimensions 2010B**

(unit: mm)

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