

<b>SANYO</b>	No.3712	<b>2SC4547</b>
	NPN Planar Silicon Darlington Transistor	
Driver Applications		

**Applications**

- Suitable for use in switching of L load (motor drivers, printer hammer drivers, relay drivers).

**Features**

- High DC current gain.
- Large current capacity and wide ASO.
- Contains zener diode of  $95 \pm 10V$  between collector and base.
- Uniformity in collector-to-base breakdown voltage due to adoption of accurate impurity-diffusion process.
- High inductive load handling capability.

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

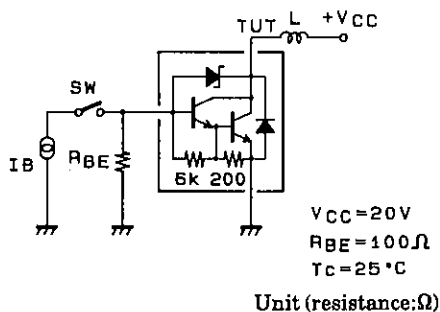
			unit
Collector-to-Base Voltage	$V_{CB0}$	※85	V
Collector-to-Emitter Voltage	$V_{CE0}$	※85	V
Emitter-to-Base Voltage	$V_{EB0}$	6	V
Collector Current	$I_C$	3	A
Peak Collector Current	$i_{cp}$	5	A
Base Current	$I_B$	0.5	A
Collector Dissipation	$P_C$	1.75	W
$T_c = 25^\circ C$			
Junction Temperature	$T_j$	30	W
Storage Temperature	$T_{stg}$	150	$^\circ C$
		-55 to +150	$^\circ C$

※ : With Zener diode ( $95 \pm 10V$ ).

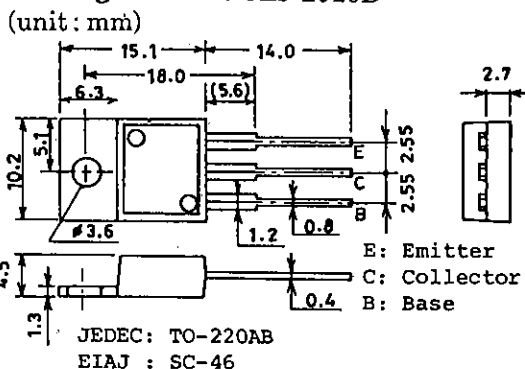
**Electrical Characteristics at  $T_a = 25^\circ C$**

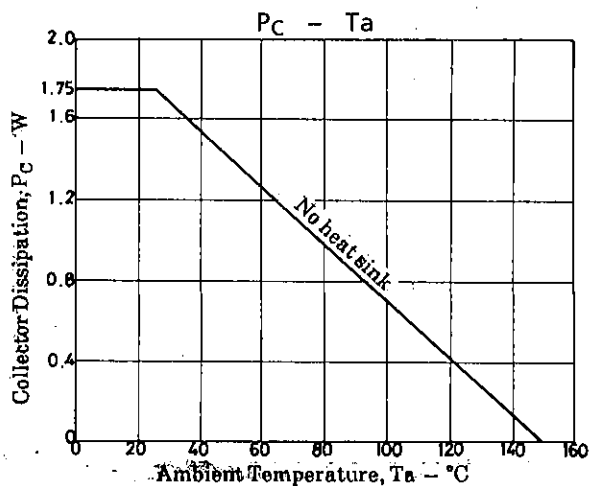
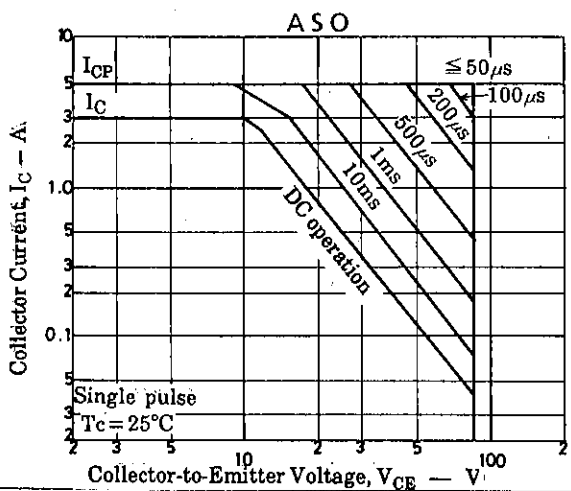
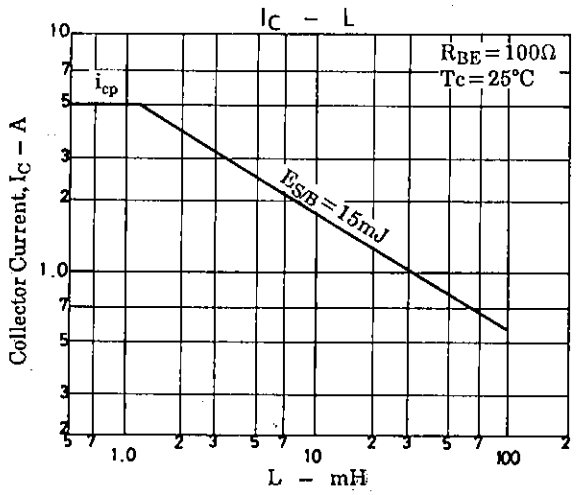
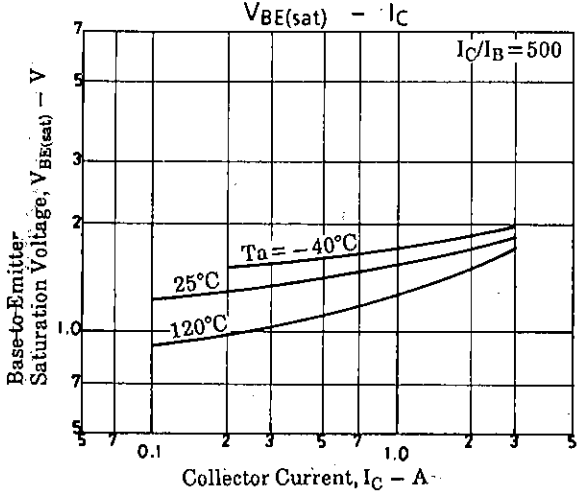
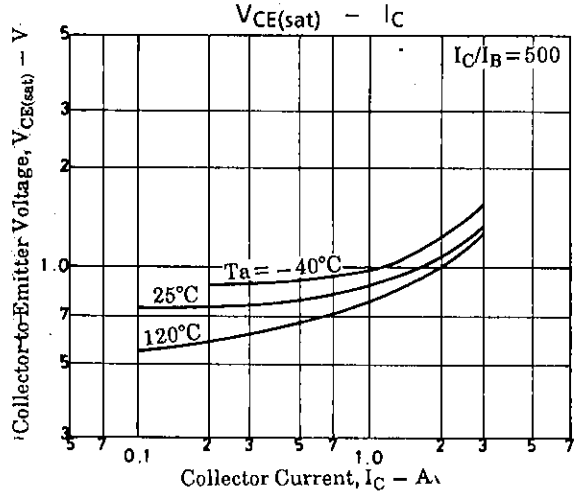
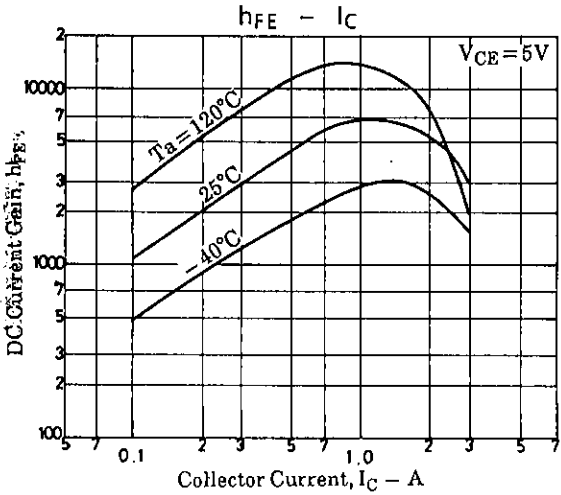
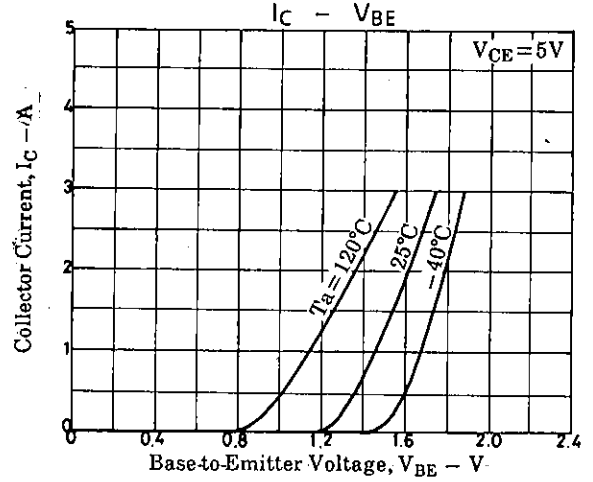
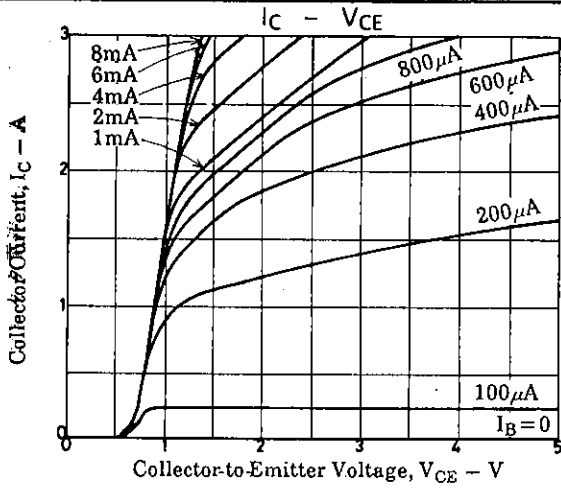
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 70V, I_E = 0$			10	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$			3	mA
DC Current Gain	$h_{FE}$	$V_{CE} = 3V, I_C = 1.5A$	2000	6000		
Gain-Bandwidth Product	$f_T$	$V_{CE} = 5V, I_C = 1.5A$		50		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 1.5A, I_B = 3mA$		0.9	1.5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 1.5A, I_B = 3mA$			2.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 0.1mA, I_E = 0$	85	95	105	V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	85	95	105	V
Inductive Load Voltage	$Es/b$	$L = 100mH, R_{BE} = 100\Omega$	15			mJ

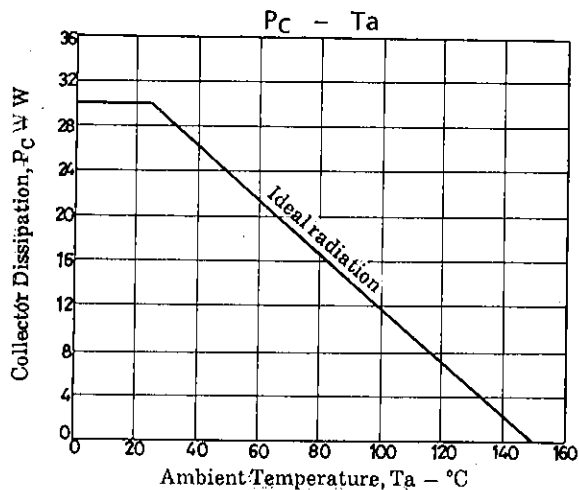
**Es/b Test Circuit**



**Package Dimensions 2010B**







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