

SANYO	No.3712	2SC4547
	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 $T_a = 25^\circ C$

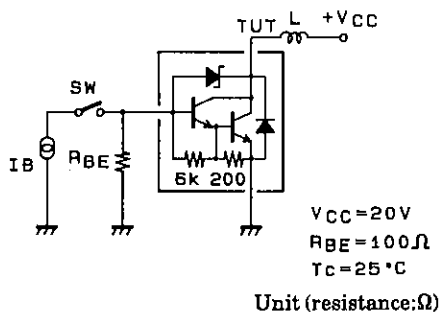
			unit
Collector-to-Base Voltage	V_{CBO}	※85	V
Collector-to-Emitter Voltage	V_{CEO}	※85	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	3	A
Peak Collector Current	i_{cp}	5	A
Base Current	I_B	0.5	A
Collector Dissipation	P_C	1.75	W
$T_c = 25^\circ C$			
Junction Temperature	T_j	30	W
Storage Temperature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

※ : With Zener diode ($95 \pm 10V$).

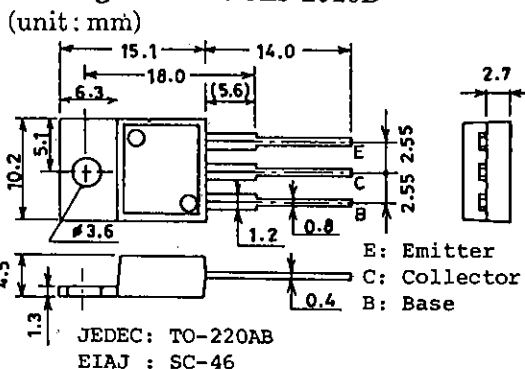
Electrical Characteristics at $T_a = 25^\circ C$

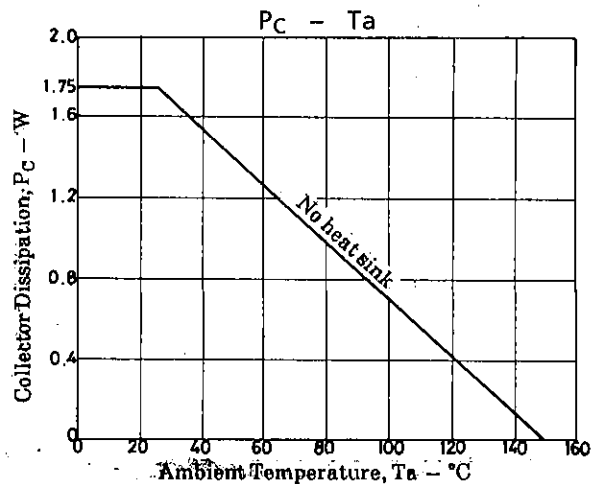
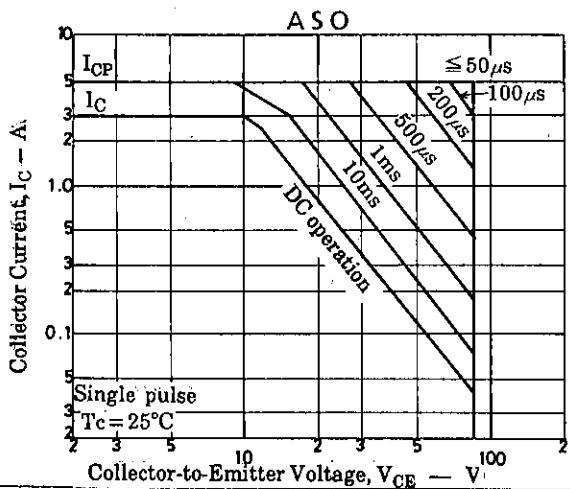
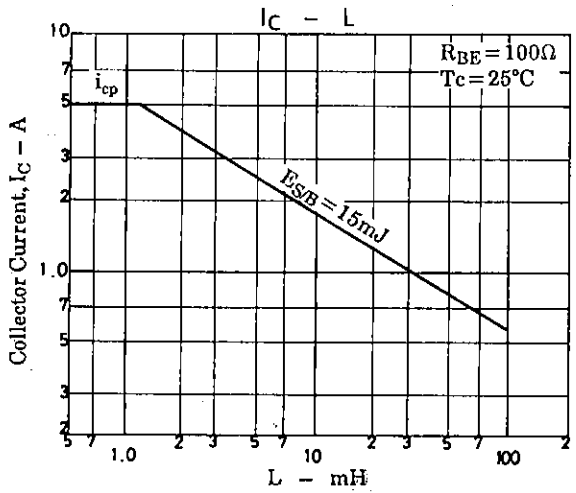
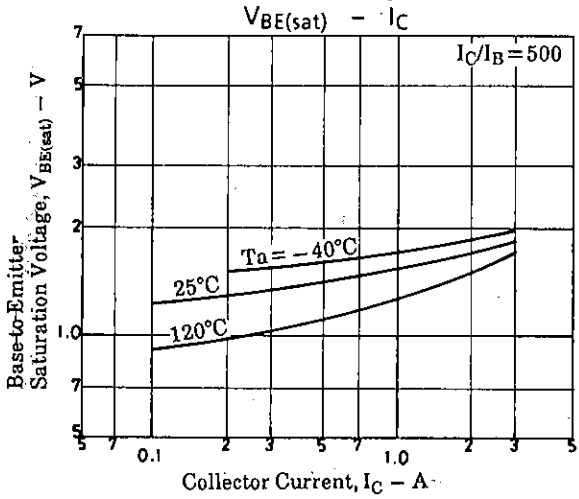
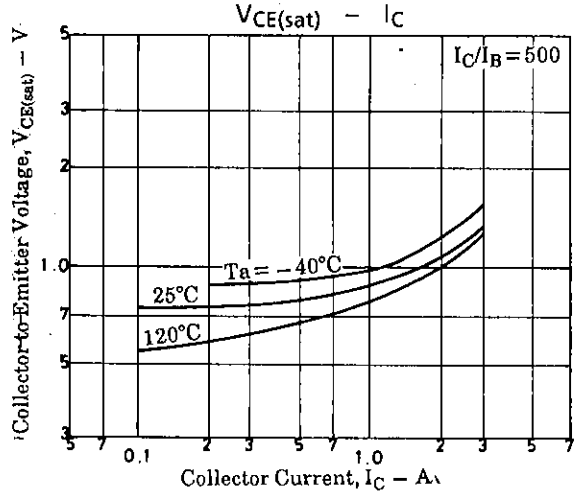
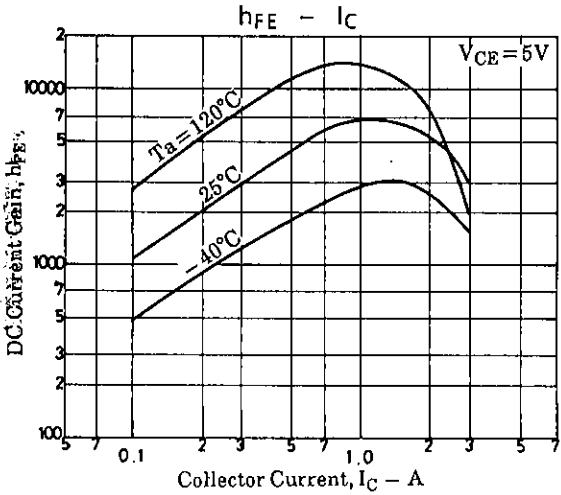
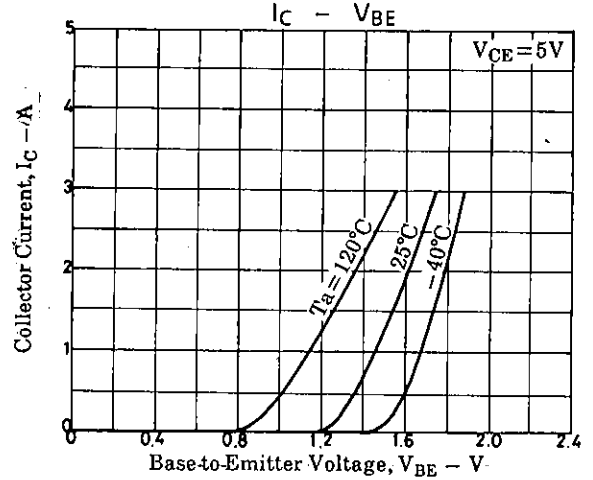
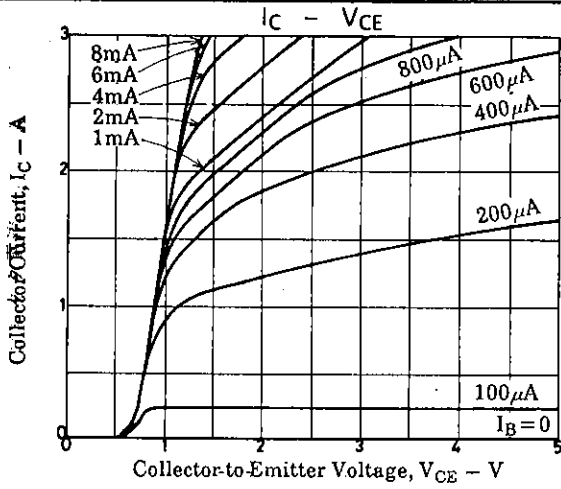
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 70V, I_E = 0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			3	mA
DC Current Gain	h_{FE}	$V_{CE} = 3V, I_C = 1.5A$	2000	6000		
Gain-Bandwidth Product	f_T	$V_{CE} = 5V, I_C = 1.5A$		50		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 1.5A, I_B = 3mA$		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

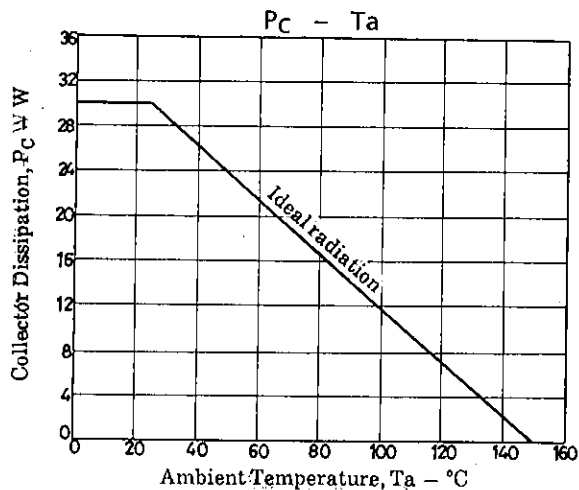
Es/b Test Circuit



Package Dimensions 2010B







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