Ordering number: EN 3881

SANYO

No.3881

2SB1510/2SD2284

PNP/NPN Epitaxial Planar Silicon Transistors

60V/3A Driver Applications

Applications

· Motor drivers, hammer drivers, relay drivers.

Features

· High DC current gain.
· Good dependence of DC current gain.

( ) : 2SB1510

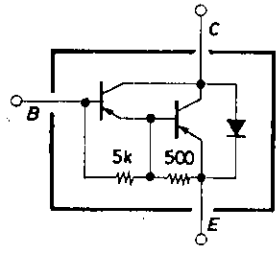
Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V_{CBO}	(−)80	V
Collector-to-Emitter Voltage	V_{CEO}	(−)60	V
Emitter-to-Base Voltage	V_{EBO}	(−)6	V
Collector Current	I_C	(−)3	A
Peak Collector Current	i_{cp}	(−)6	A
Collector Dissipation	P_C	1.5	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +125	°C

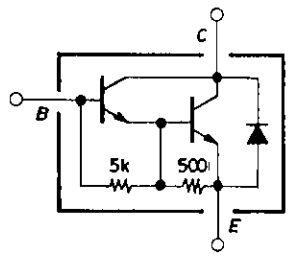
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB} = (−)60V, I_E = 0			(−)10	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = (−)5V, I_C = 0			(−)2.5	mA
DC Current Gain	$h_{FE}(1)$	V_{CE} = (−)2V, I_C = (−)1A	2000			
	$h_{FE}(2)$	V_{CE} = (−)2V, I_C = (−)2A	1000			
C-E Saturation Voltage	$V_{CE(sat)}$	I_C = (−)2A, I_B = (−)4mA			(−)1.5	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C = (−)2A, I_B = (−)4mA			(−)2.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C = (−)1mA, I_E = 0	(−)80			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C = (−)10mA, R_{BE} = ∞	(−)60			V

Electrical Connection



2SB1510

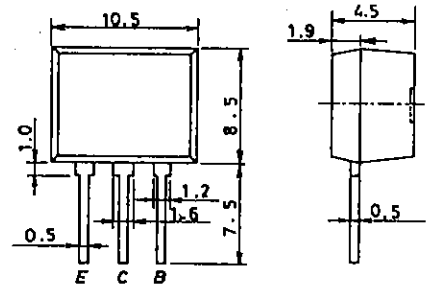


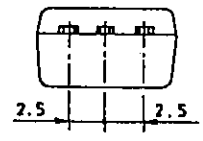
2SD2284

Unit (Resistance : Ω)

Package Dimensions 2084

(unit : mm)

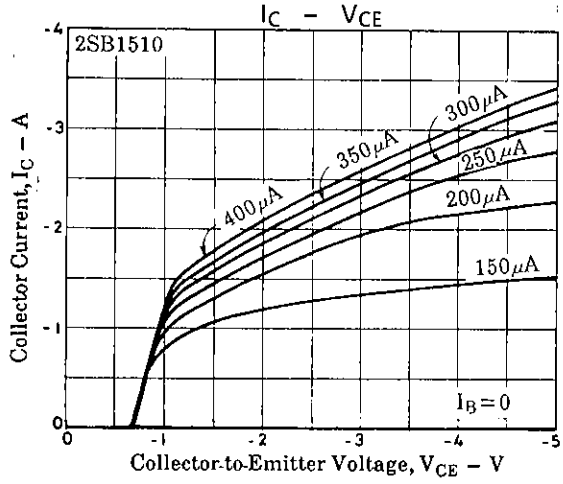




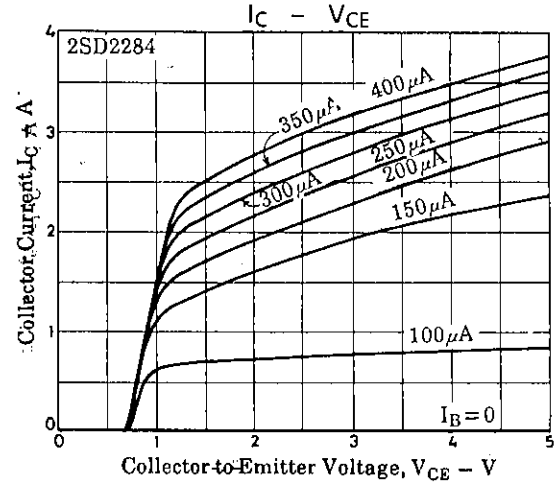
E : Emitter
C : Collector
B : Base

SANYO : FLP

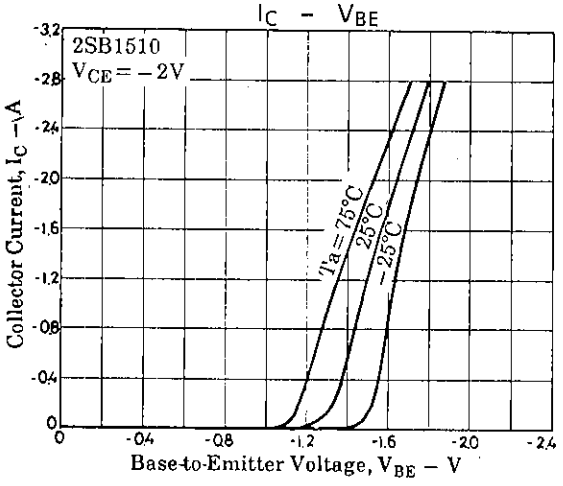
I_C – V_{CE}



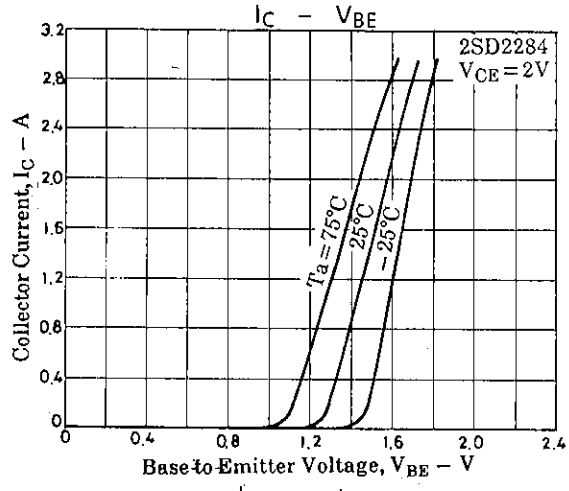
I_C – V_{CE}



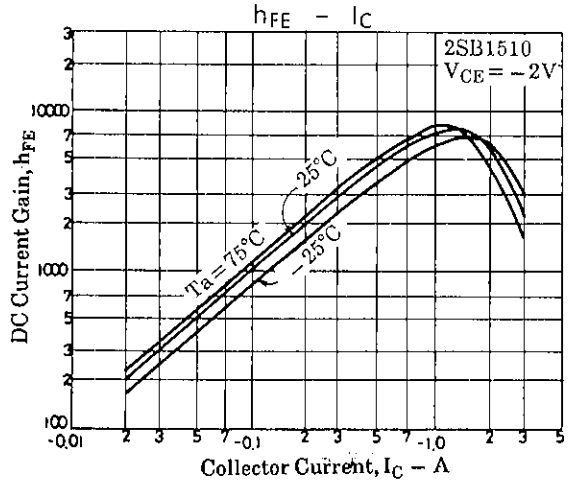
I_C – V_{BE}



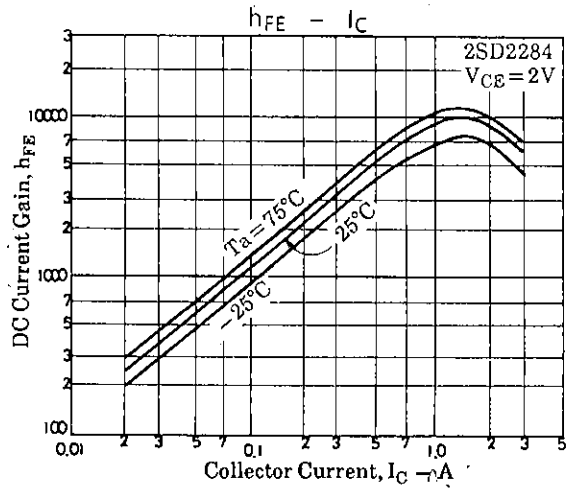
I_C – V_{BE}



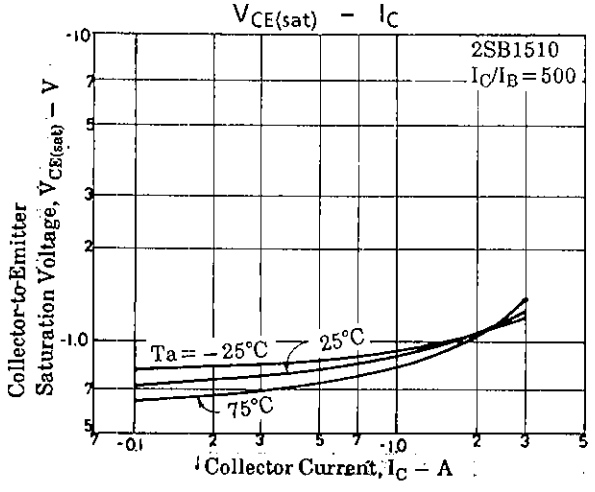
h_{FE} – I_C



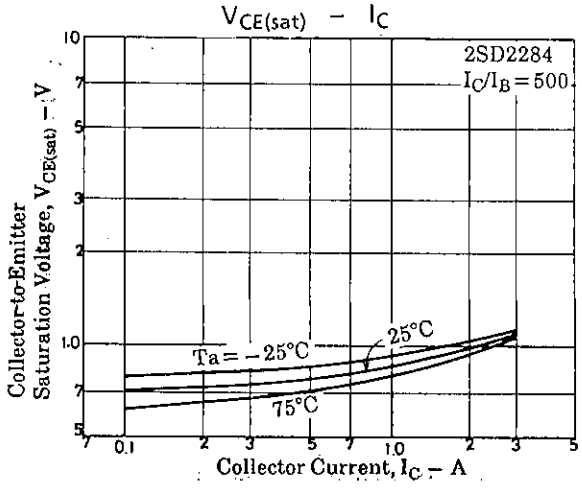
h_{FE} – I_C

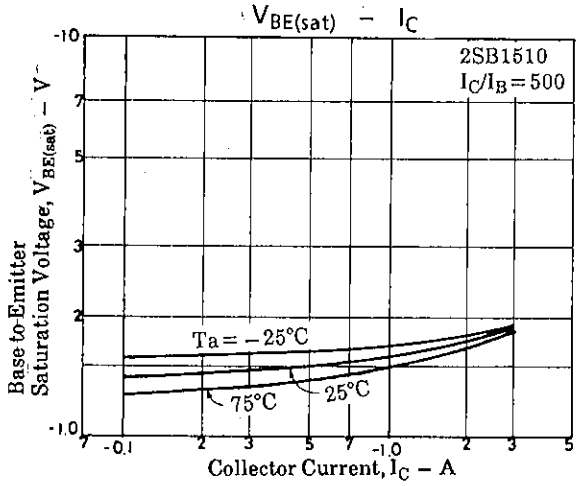


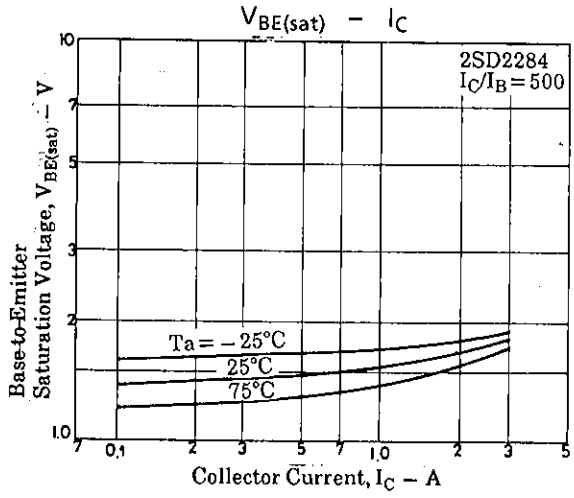
$V_{CE(sat)}$ – I_C

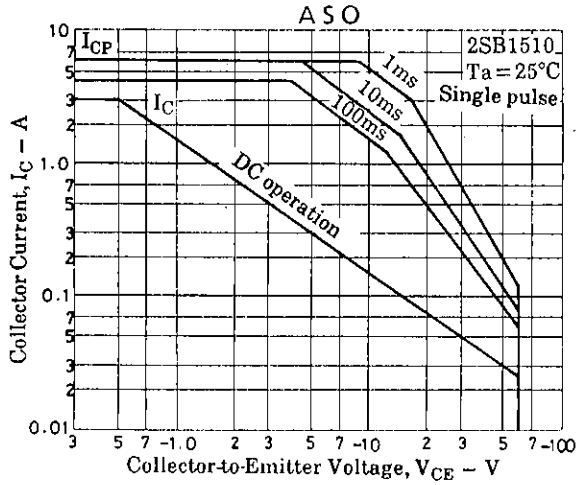


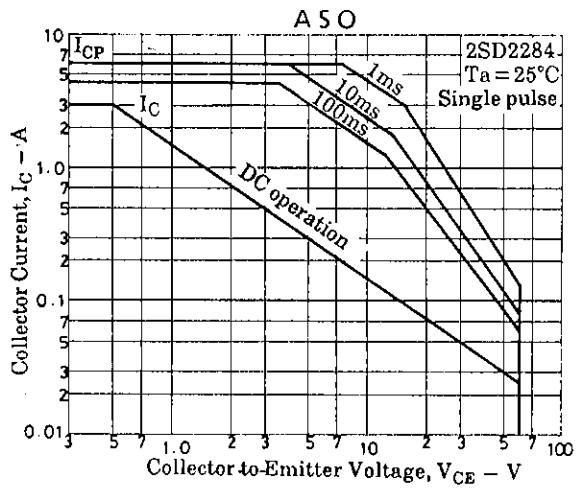
$V_{CE(sat)}$ – I_C

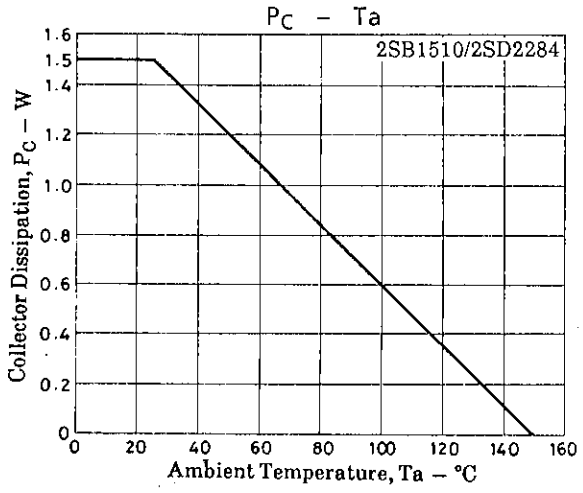












■ No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.

■ Anyone purchasing any products described or contained herein for an above-mentioned use shall:
① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.

■ Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.