Solitron Devices, Inc.

SPECIFICATIONS

EDP CODE: 345SXA 585 A
455X 585
NO.: BD130
TYPE: NPN SILICON POWER
CASE: TO-3

MAXIMUM RATINGS

Voltage, Collector to Base (V_{CBO})	100	V
Voltage, Collector to Emitter (V_{CE})	60	V
Voltage, Emitter to Base (V_{EBO})	7.0	V
Collector Current (I_C)	15	A
Base Current (I_B)	7.0	A
Maximum Thermal Resistance, Junction to Case	1.55	°C/W
Maximum Junction Temperature	-55°C TO +200	°C
Power of Transistor (P_T) T_C = 100° C	64.5	WATTS
Power of Transistor (P_T) T_C = 25°C	113	WATTS

T-C = 25°C

PERFORMANCE CHARACTERISTICS

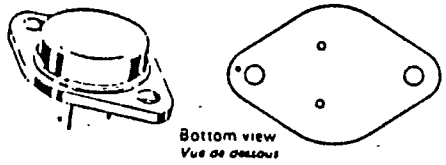
NO.	SYMBOL	CONDITIONS	MIN.	MAX.	UNITS	
1	V-CEO(SUS)*	I-C = 200 mA I-B = 0	60	-	V	A
2	I-CEX1	V-CE = 100V V-BE = -1.5 V		5.0	MA	
3	I-EBO	I-C = 0 V-EB = 7.0V		5.0	mA	
4	h-FE *	I-C = 4.0A V-CE = 4.0V	20	70		A
5	V-CE(S) *	I-C = 4.0A I-B = 400 mA		1.1	V	A
6	V-BE *	I-C = 4.0A V-CE = 4.0V		1.8	V	A
7	I-CEX2	V-CE = 100V V-BE = -1.5V t_C = 150°C		30	MA	
8						
9						
10						
11						
12		CAPABILITY TYPICAL				
13	fT	I-C = 100mA V-CE = 4.0V	1.1(TYP)		MHZ	
14						
15						
16						
17						
18						
19						
20						

NOTES: * PULSED: P.W. = 300USEC, D.C = ≤ 2.0%
REF DWG. THOMSON-CSF BD130 DATA SHEET

REV 'A' ADDED THREE DIGIT EDP CODE, PULSE TESTS. 4-2-81 E.G.
DELETED SHTS 2 & 3.

MARK -S-
BD130
DATE CODE

CUSTOMER: GENERAL PURPOSE



Weight : 14,4 g.

Collector is connected to case

FIG. #1

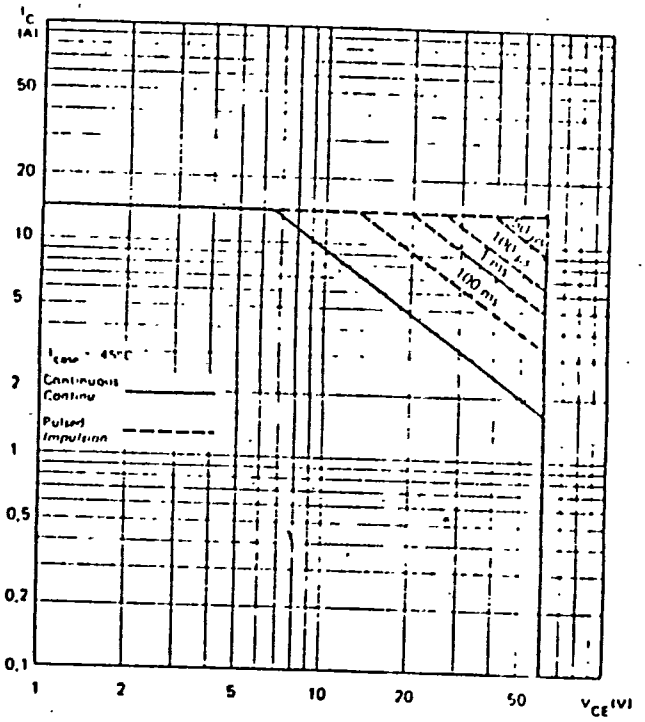


FIG. #2

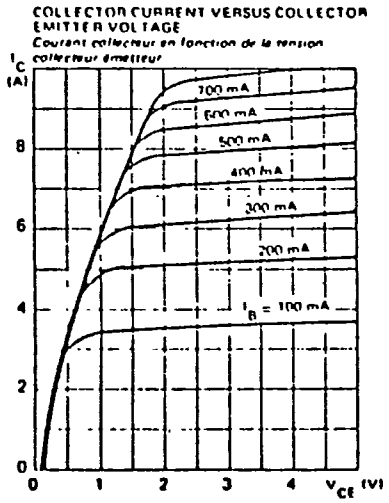


FIG. #3

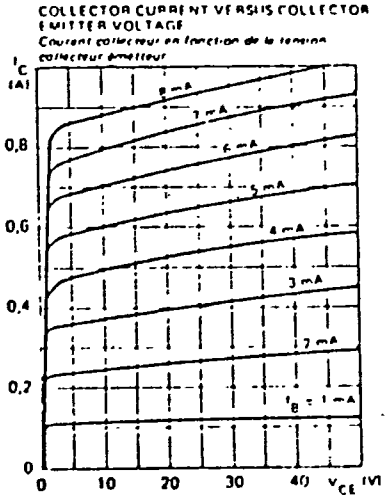


FIG. #4

STATIC FORWARD CURRENT TRANSFER RATIO VERSUS COLLECTOR CURRENT

Valeur statique du rapport de transfert direct du courant en fonction du courant collecteur

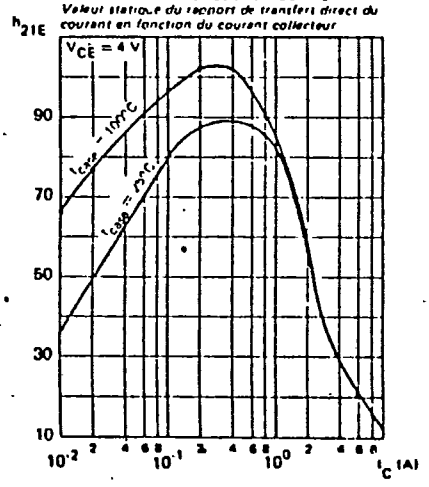


FIG. 5

COLLECTOR CURRENT VERSUS BASE EMITTER VOLTAGE

Courant collecteur en fonction de la tension base émetteur

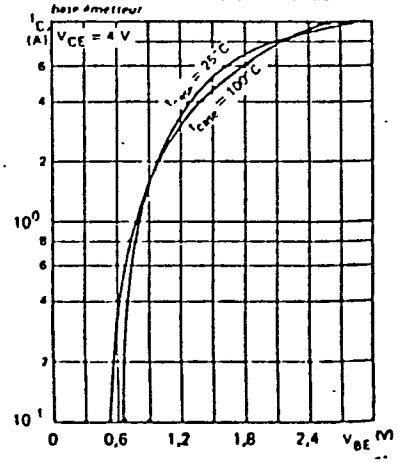


FIG. 6

COLLECTOR EMITTER SATURATION VOLTAGE VERSUS COLLECTOR CURRENT

Tension de saturation collecteur émetteur en fonction du courant collecteur

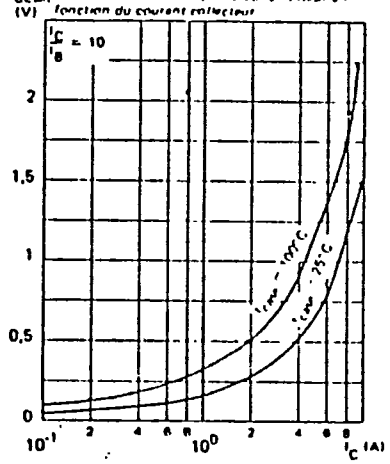


FIG. 7

BASE EMITTER SATURATION VOLTAGE VERSUS COLLECTOR CURRENT

Tension de saturation base émetteur en fonction du courant collecteur

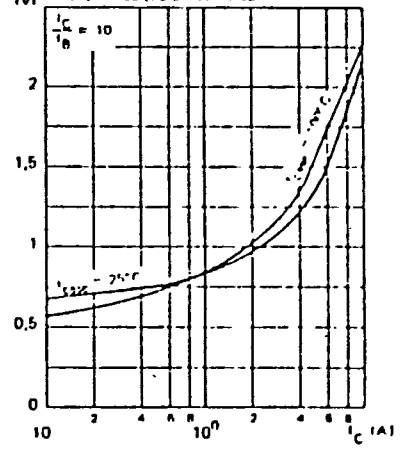


FIG. 8

TRANSITION FREQUENCY VERSUS COLLECTOR CURRENT

Fréquence de transition en fonction du courant collecteur

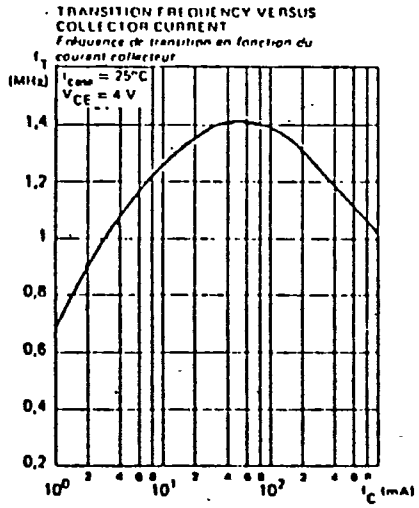


FIG. 9

TRANSIENT THERMAL RESISTANCE DERATING FACTOR UNDER PULSES CONDITIONS

Facteur de réduction de la résistance thermique en régime d'impulsions

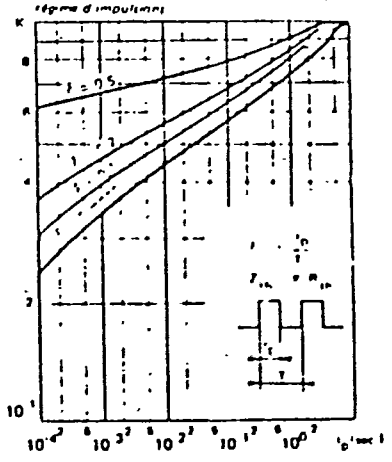


FIG. 10