

SANYO

No.1858B

2SC3792

NPN Epitaxial Planar Silicon Transistor

High h_{FE} , Low-Frequency
General-Purpose Amp Applications**Applications**

- Low frequency general-purpose amplifiers, drivers, muting circuits

Features

- Adoption of FBET process
- High DC current gain
- High V_{EBO} ($V_{EBO} \geq 25V$)
- High reverse h_{FE} (150 typ.)
- Small ON resistance [$R_{on}=1\Omega$ ($I_B=5mA$)]

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

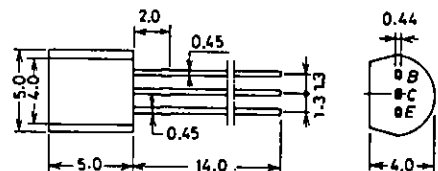
			unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	25	V
Collector Current	I_C	500	mA
Collector Current(Pulse)	I_{CP}	800	mA
Base Current	I_B	100	mA
Collector Dissipation	P_C	500	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

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

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=40V, I_E=0$			0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=20V, I_C=0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=10mA$	300		1200	
Gain-Bandwidth Product	f_T	$V_{CE}=10V, I_C=10mA$		250		MHz
Output Capacitance	c_{ob}	$V_{CB}=10V, f=1MHz$		4.0		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=2mA$	0.12	0.5		V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA, I_E=2mA$	0.85	1.2		V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	50			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	20			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	25			V

Package Dimensions 2003A

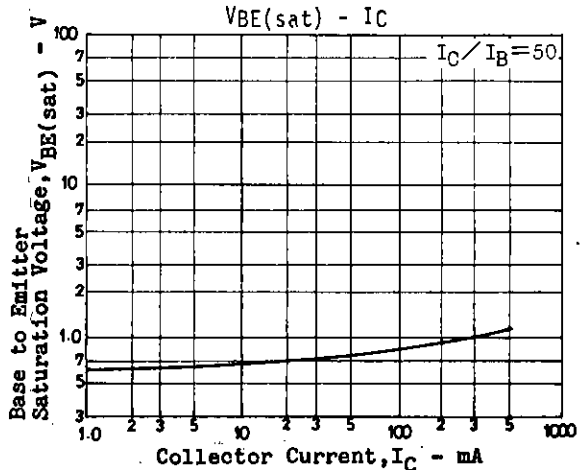
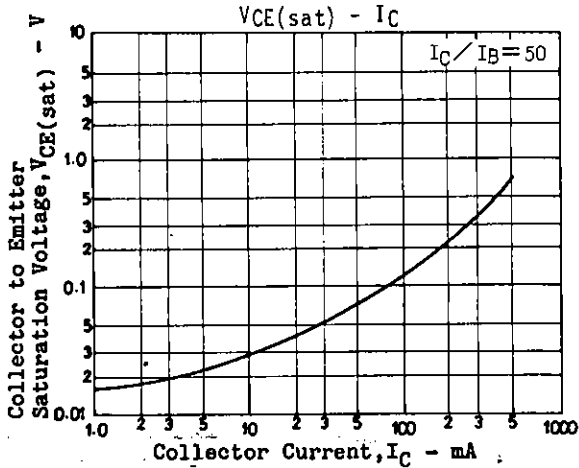
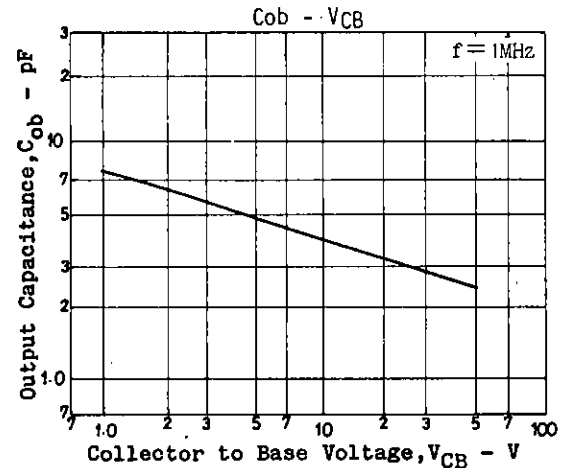
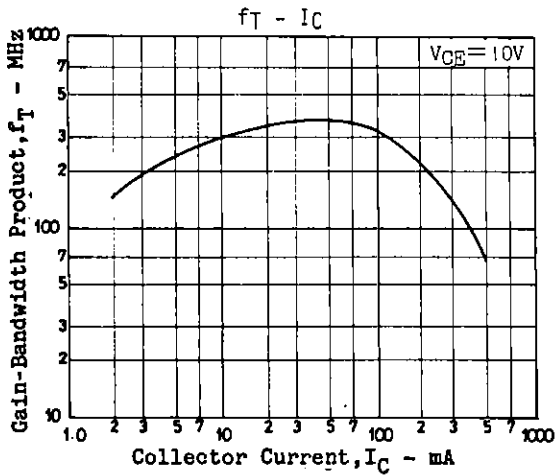
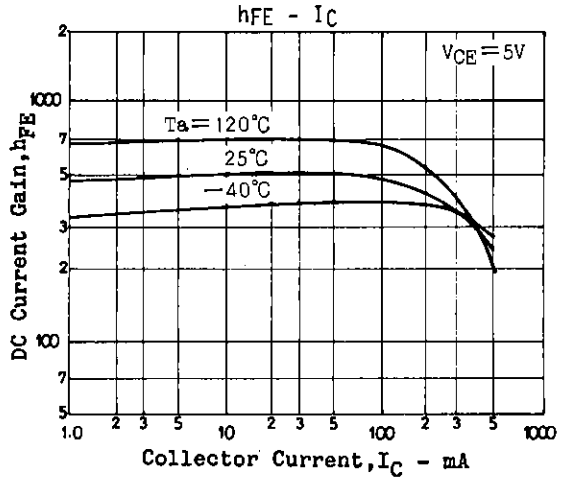
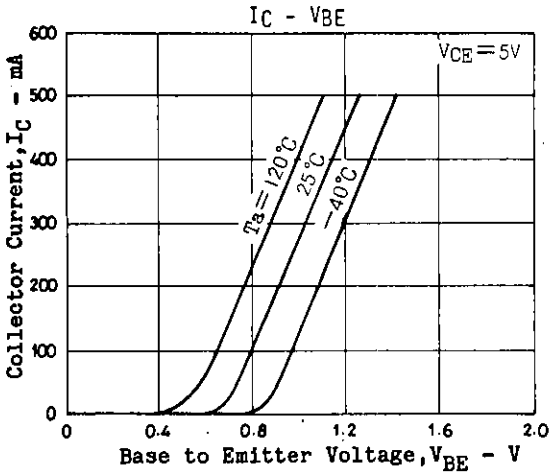
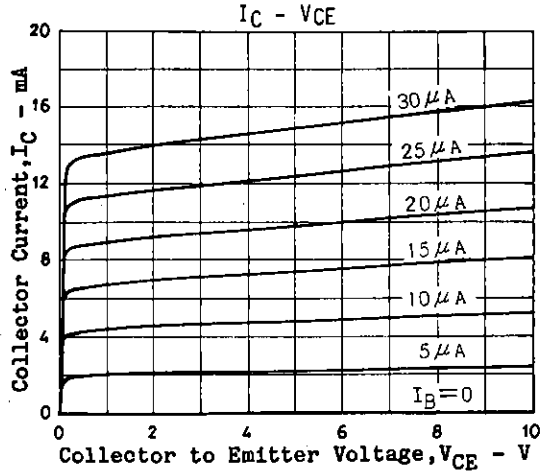
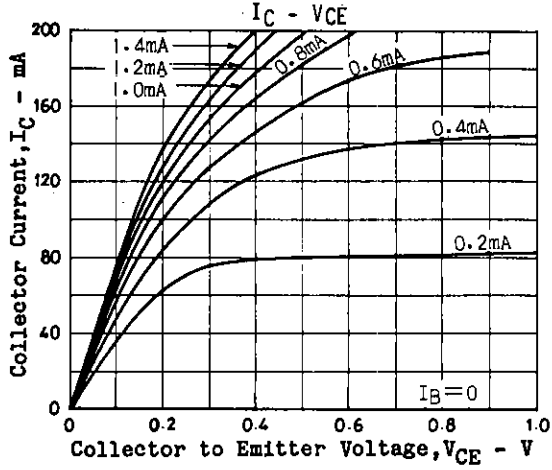
(unit: mm)

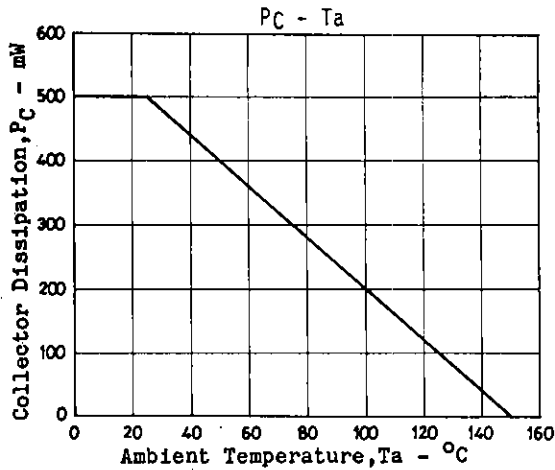
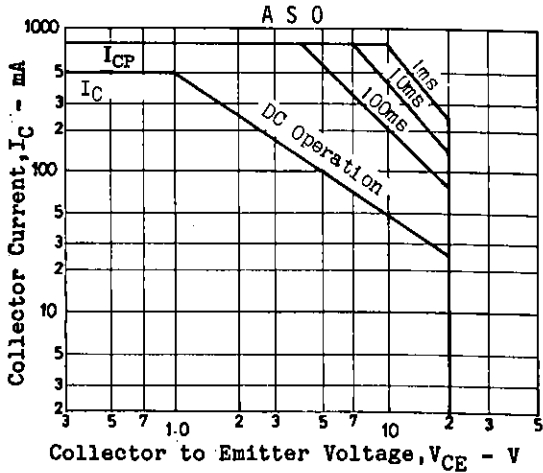
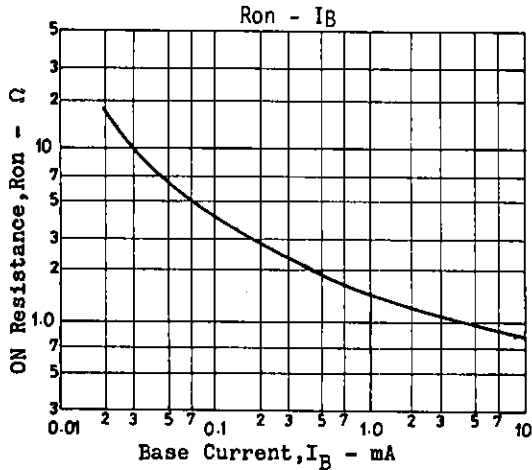


JEDEC: TO-92
EIAJ: SC-43
SANYO: NP

B. Base
C. Collector
E. Emitter

SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN





- 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.