

Ordering number: EN1858B -

	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 [$R_{on}=1\Omega$ ($I_B=5mA$)]

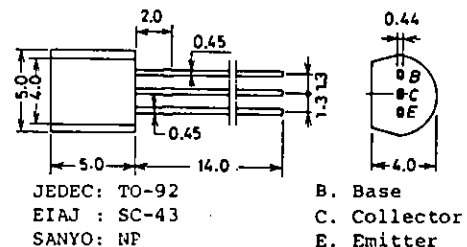
Absolute Maximum Ratings at $T_a=25^\circ C$

			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

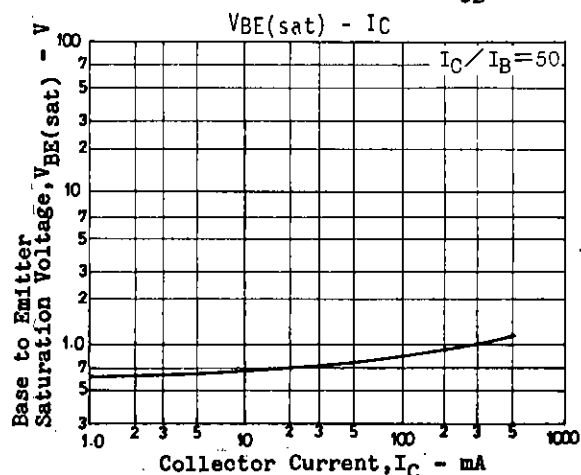
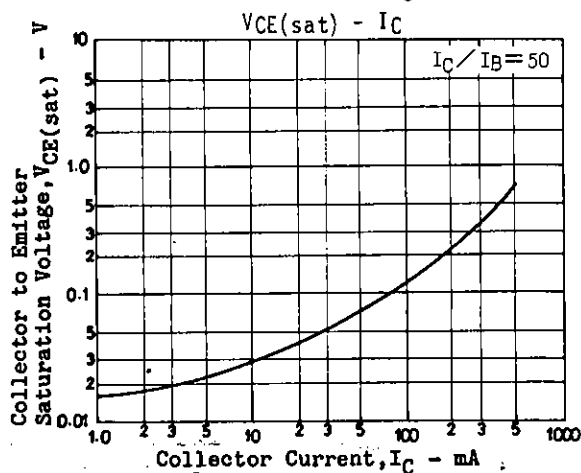
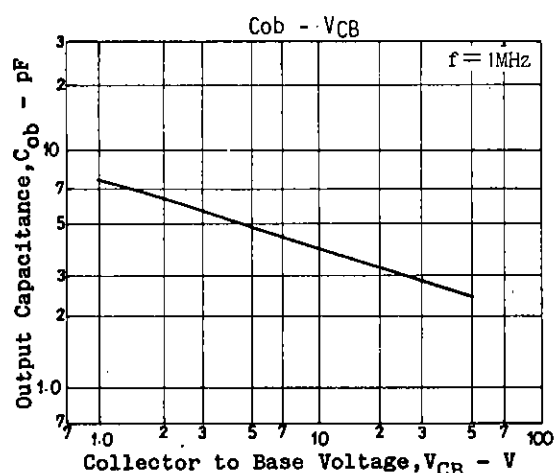
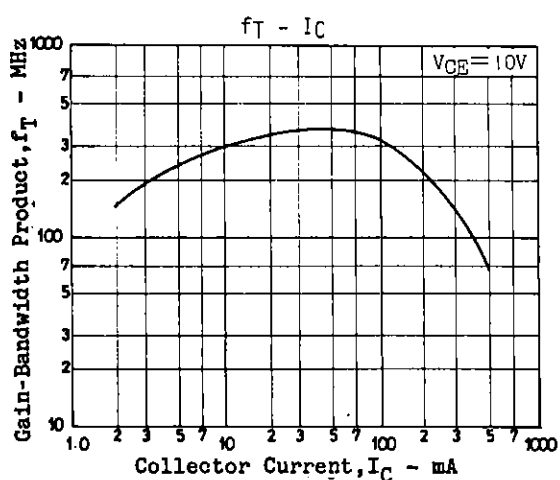
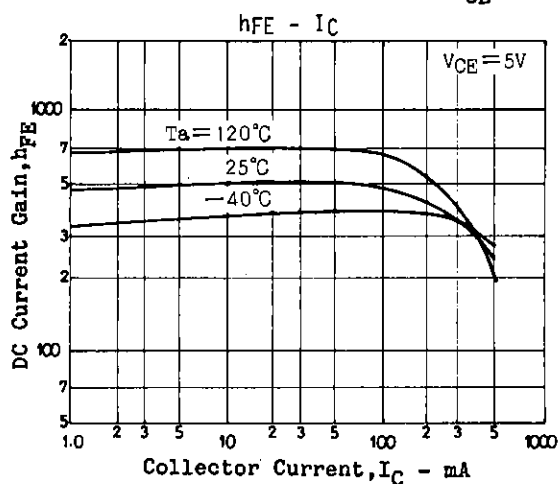
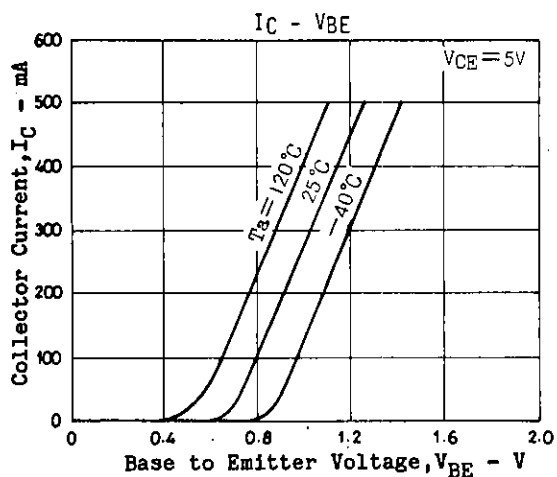
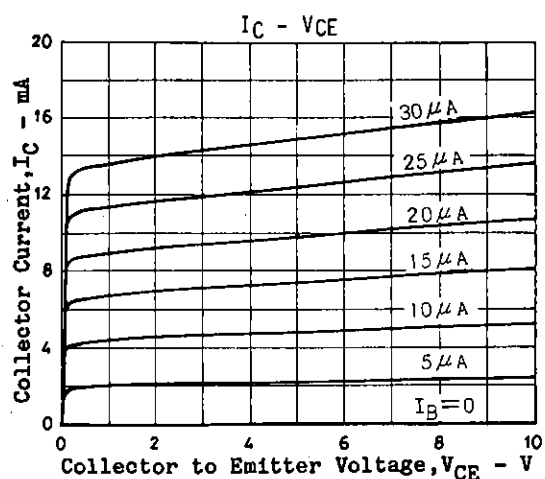
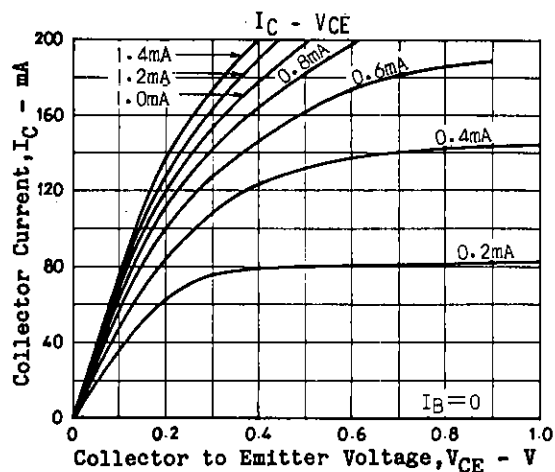
Package Dimensions 2003A (unit: mm)



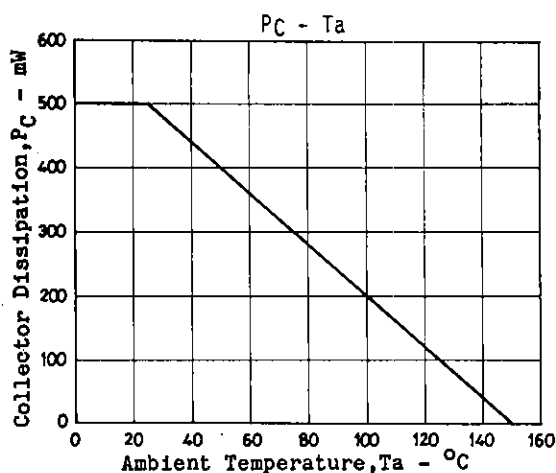
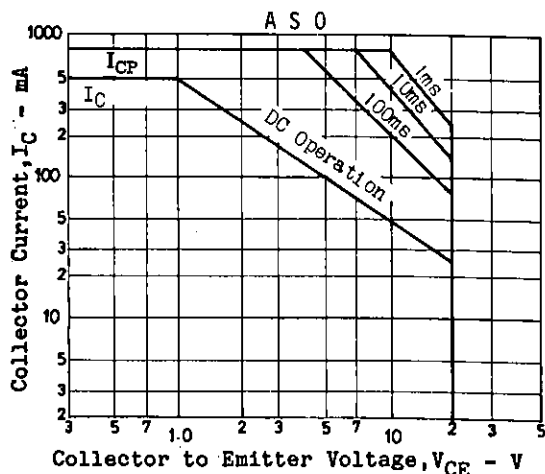
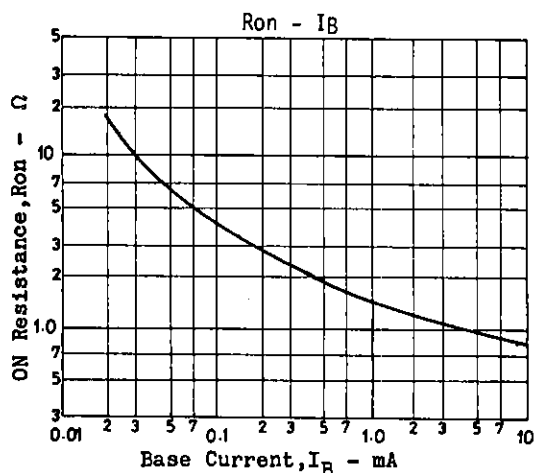
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