**Features**

- High power gain
- High cutoff frequency
- Small  $c_{ob}$ ,  $c_{re}$
- Very small-sized package permitting the 2SC4400-applied sets to be made small and slim

**Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

			unit
Collector to Base Voltage	$V_{CBO}$	40	V
Collector to Emitter Voltage	$V_{CEO}$	18	V
Emitter to Base Voltage	$V_{EBO}$	3	V
Collector Current	$I_C$	50	mA
Collector Dissipation	$P_C$	150	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

**Electrical Characteristics at  $T_a = 25^\circ\text{C}$** 

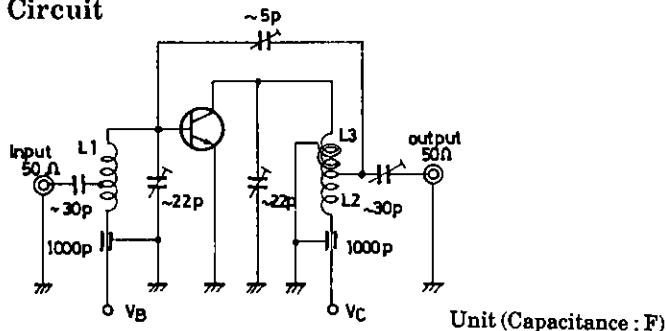
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 18\text{V}, I_E = 0$			0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 2\text{V}, I_C = 0$			0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE} = 10\text{V}, I_C = 5\text{mA}$	60*		270*	
Gain-Bandwidth Product	$f_T$	$V_{CE} = 10\text{V}, I_C = 5\text{mA}$		750		MHz
Output Capacitance	$c_{ob}$	$V_{CB} = 10\text{V}, f = 1\text{MHz}$		0.7	1.2	pF
Reverse Transfer Capacitance	$c_{re}$	$V_{CB} = 10\text{V}, f = 1\text{MHz}$		0.45		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}, I_B = 1\text{mA}$			0.2	V
B-C Time Constant	$r_{bb}'c_c$	$V_{CE} = 10\text{V}, I_C = 5\text{mA}, f = 31.9\text{MHz}$			23	ps
Power Gain	PG	$V_{CE} = 10\text{V}, I_C = 10\text{mA}, f = 100\text{MHz}$		28		dB

\* : The 2SC4400 is classified by 5mA  $h_{FE}$  as follows.

60	3	120	90	4	180	135	5	270
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Marking : RT

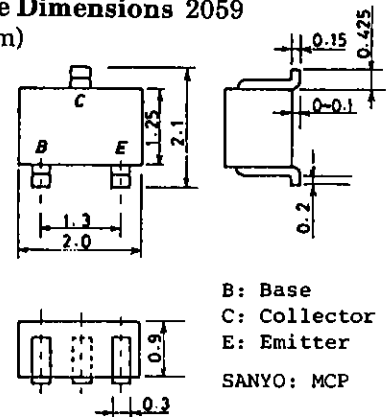
$h_{FE}$  rank : 3,4,5

**PG Test Circuit**

$L_1$  : 1mm $\phi$  plated wire, 10mm $\phi$  5T, pitch 15mm,  
tap : 2T from base side

$L_2$  : 1mm $\phi$  plated wire, 10mm $\phi$  7T, pitch 10mm,  
tap : 2T from  $V_C$  side

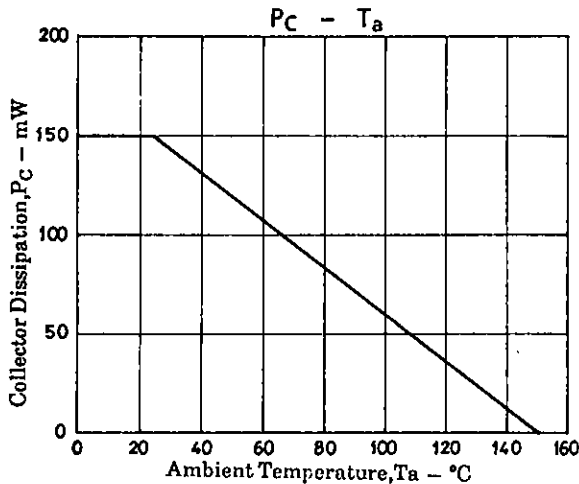
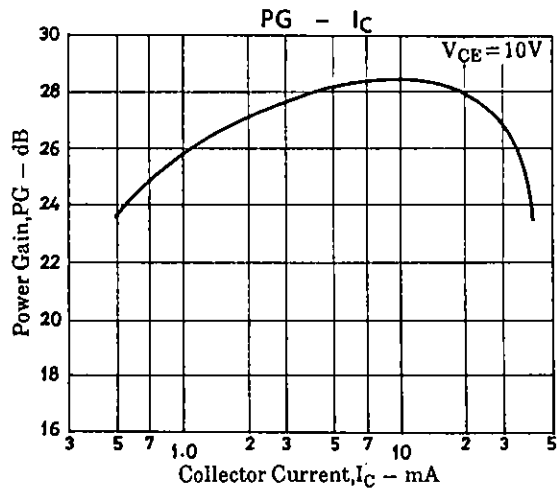
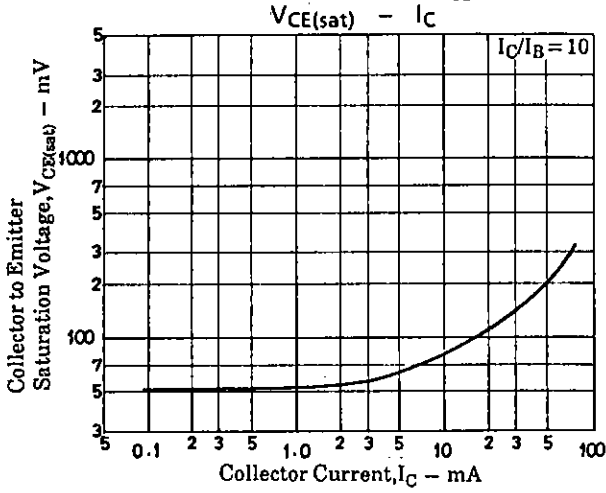
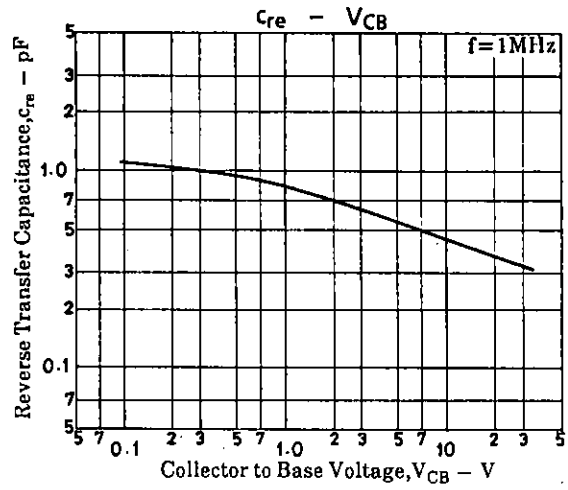
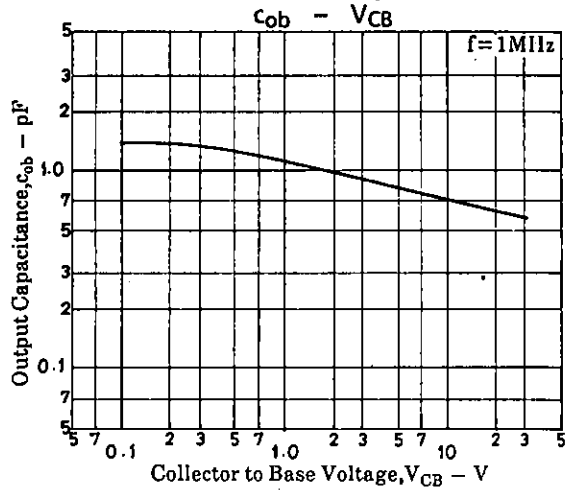
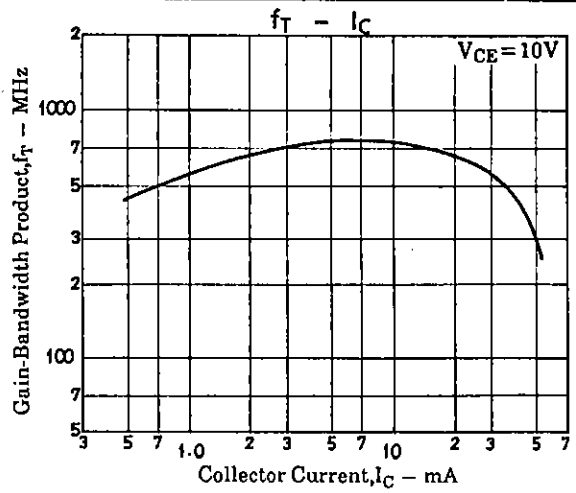
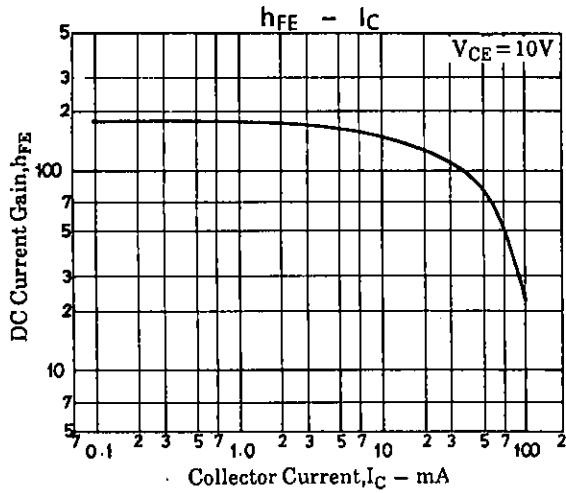
$L_3$  : 1mm $\phi$  enamel wire, 10mm $\phi$  3T, pitch 10mm

**Package Dimensions 2059**  
(unit : mm)

B: Base  
C: Collector  
E: Emitter  
SANYO: MCP

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

2SC4400



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