

**SANYO**

No.3974

**2SC4735**

NPN Epitaxial Planar Silicon Transistor

**27MHz CB Transceiver Driver Applications****Features**

- Large power type such as  $P_C = 1.5W$  when used without heatsink.
- It is possible to make appliances more compact because its height on board is 9.5mm.
- Effective in automatic inserting and counting stocked amount because of being provided for radial taping.

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

			unit
Collector-to-Base Voltage	$V_{CB0}$	75	V
Collector-to-Emitter Voltage	$V_{CER}$	75	V
	$V_{CEO}$	45	V
Emitter-to-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	1.0	A
Collector Current (Pulse)	$I_{CP}$	1.5	A
Base Current	$I_B$	200	mA
Collector Dissipation	$P_C$	1.5	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ C$

 $R_{BE} = 150\Omega$ **Electrical Characteristics at  $T_a = 25^\circ C$** 

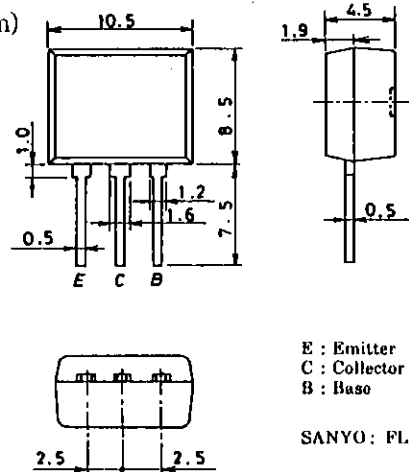
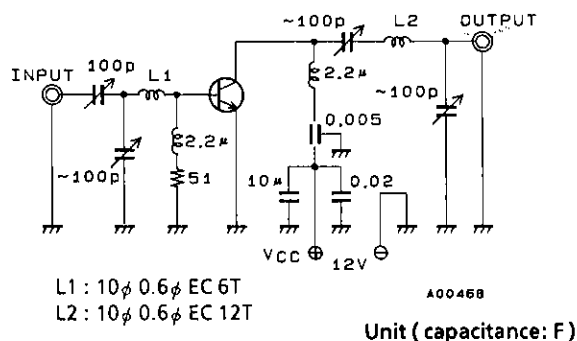
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 40V, I_E = 0$			1.0	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 4V, I_C = 0$			1.0	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = 5V, I_C = 500mA$	60※		320※	
Gain-Bandwidth Product	$f_T$	$V_{CE} = 10V, I_C = 50mA$	180	250		MHz
Output Capacitance	$C_{ob}$	$V_{CB} = 10V, f = 1MHz$		10	20	pF
Output Power	$P_O$	$V_{CC} = 12V, f = 27MHz, P_i = 35mW$	1.0	1.8		W
Collector Efficiency	$\eta_c$	See specified Test Circuit.	60			%
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50mA$		0.2	0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 500mA, I_B = 50mA$		0.9	1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	75			V
C-E Breakdown Voltage	$V_{(BR)CER}$	$I_C = 1mA, R_{BE} = 150\Omega$	75			V
	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	45			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_C = 10\mu A, I_C = 0$	5			V

※ : The 2SC4735 is classified by 500mA  $h_{FE}$  as follows :

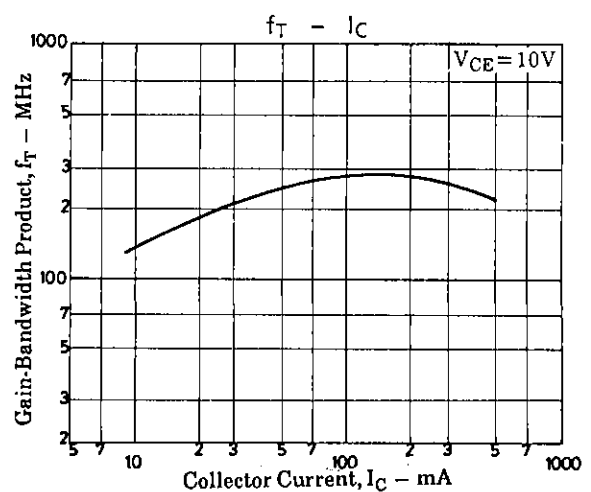
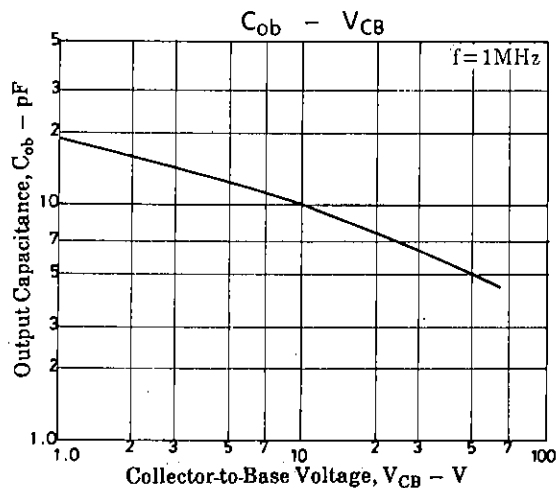
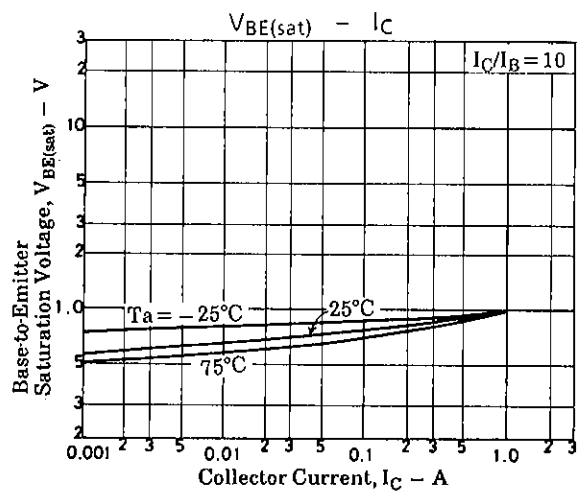
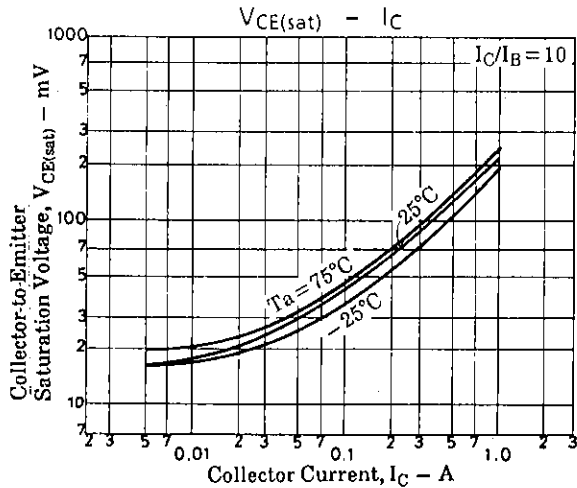
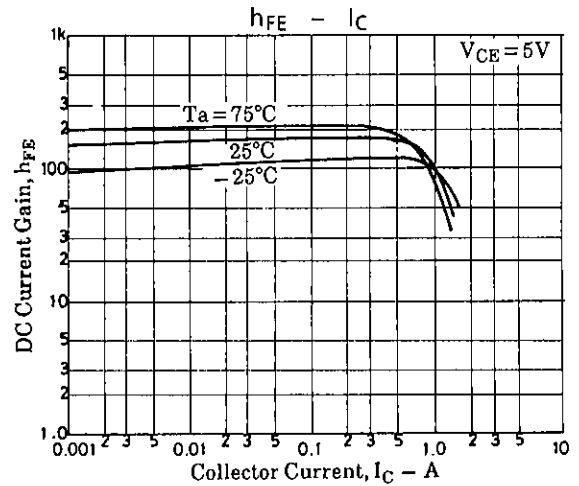
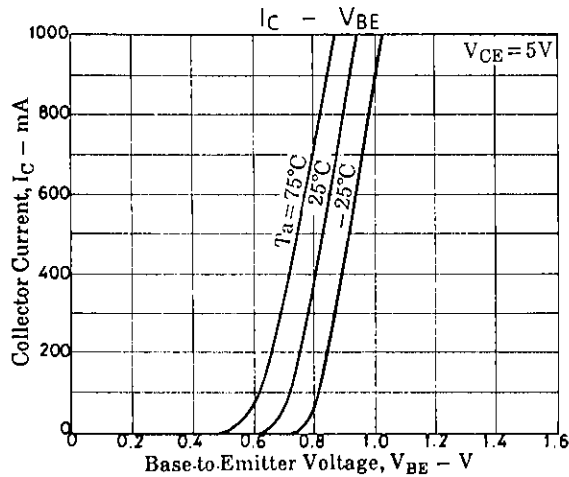
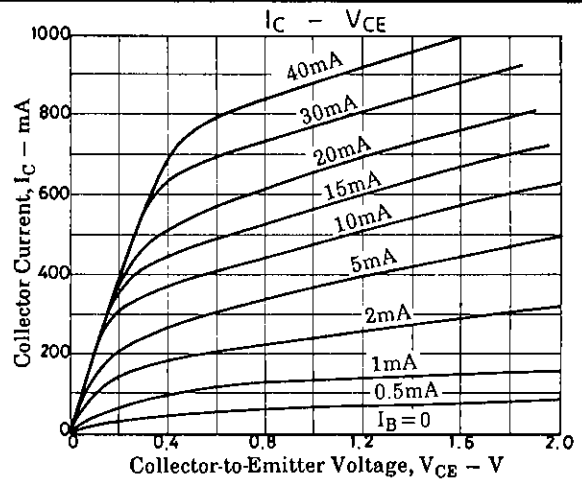
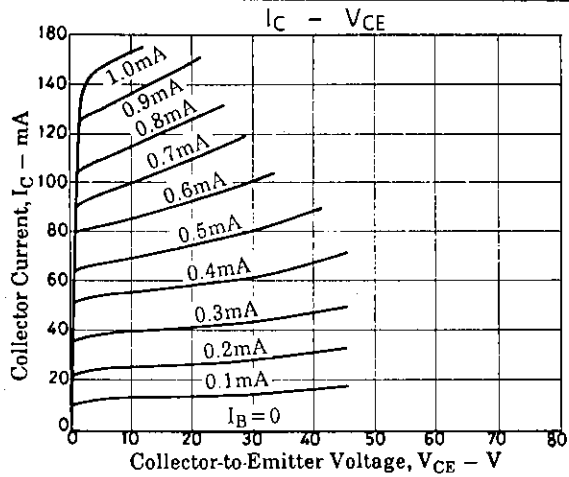
60	D	120	100	E	200	160	F	320
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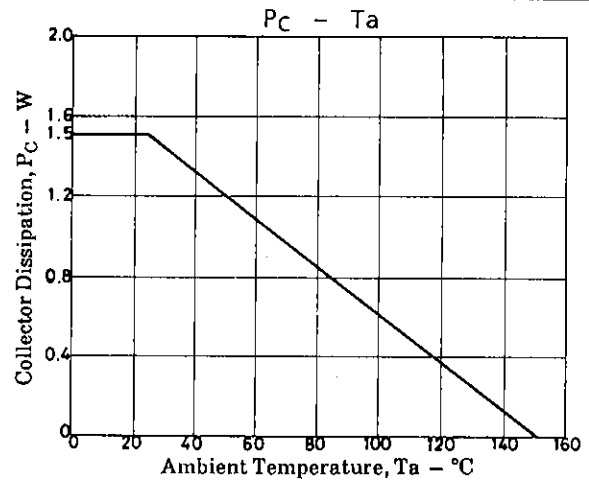
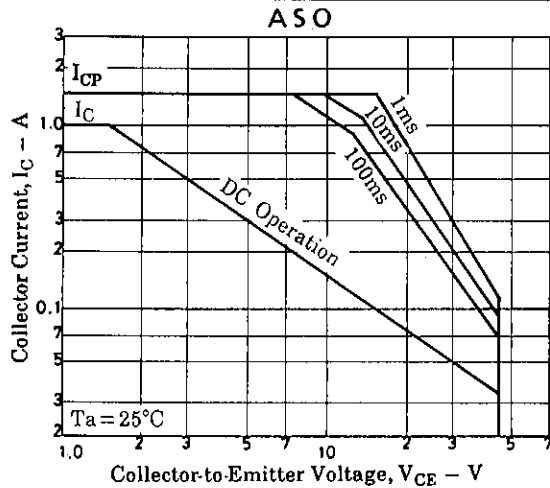
**Package Dimensions 2084**

(unit : mm)

**Collector Efficiency Test Circuit****SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

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