

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 tapping.

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

			unit
Collector-to-Base Voltage	V_{CB0}		75 V
Collector-to-Emitter Voltage	V_{CER}	$R_{BE} = 150\Omega$	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 $^\circ C$

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

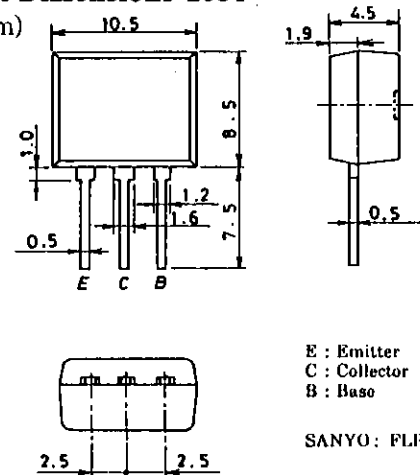
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 40V, I_E = 0$			1.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V, I_C = 0$			1.0	μA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 500mA$	60*		320*	
Gain-Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 50mA$	180	250		MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, f = 1MHz$		10	20	pF
Output Power	P_O	$V_{CC} = 12V, f = 27MHz, P_i = 35mW$	1.0	1.8		W
Collector Efficiency	η_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:

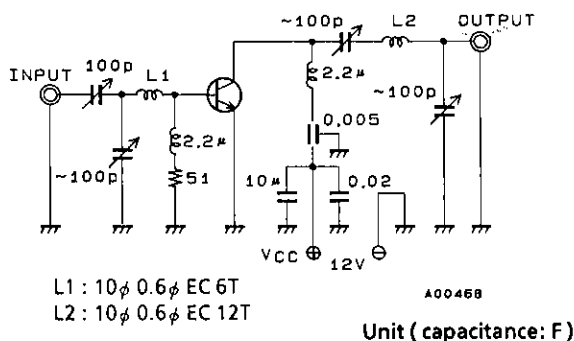
60 D 120	100 E 200	160 F 320
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Package Dimensions 2084

(unit: mm)

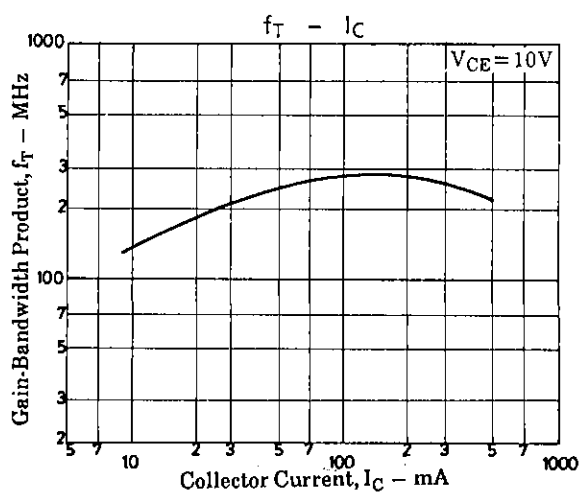
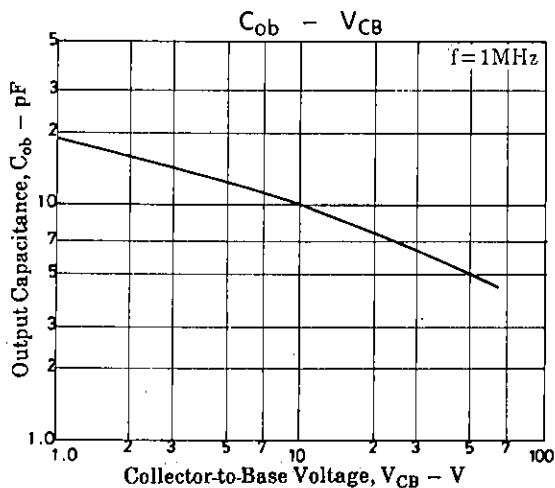
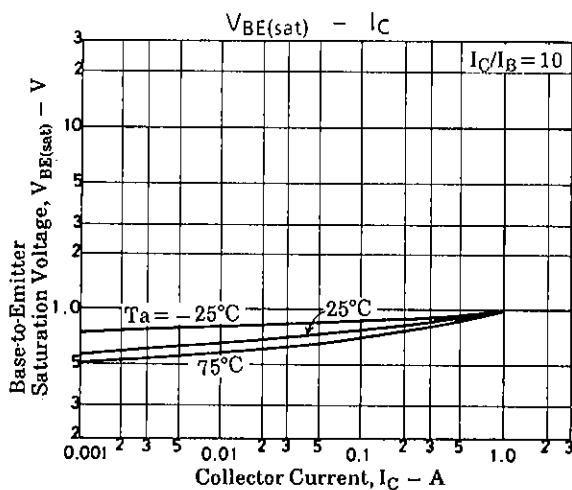
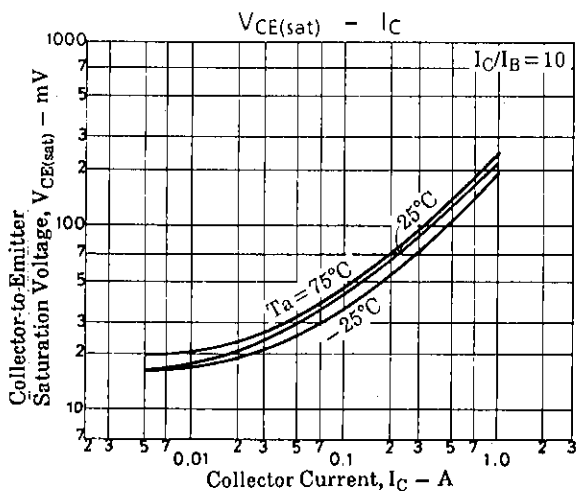
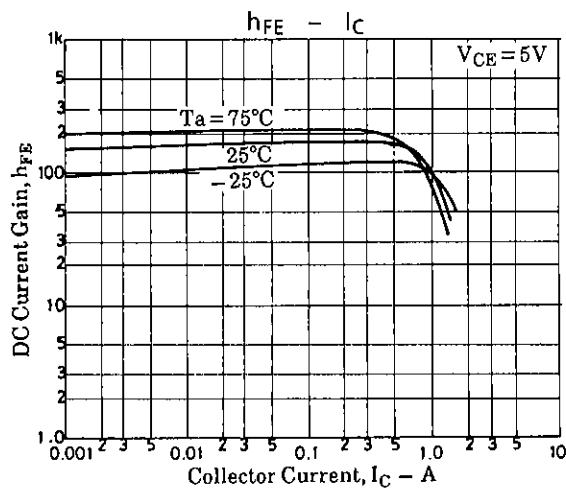
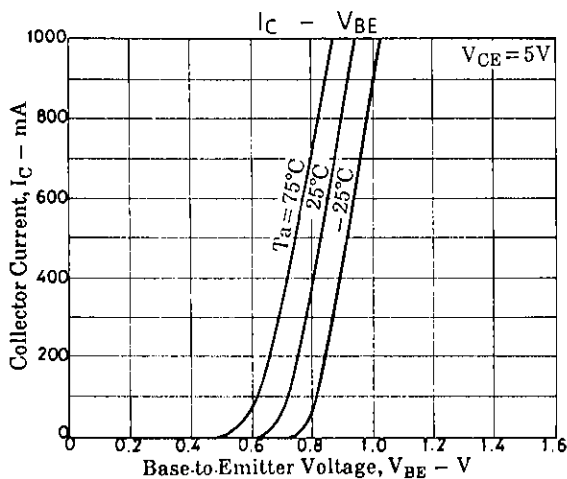
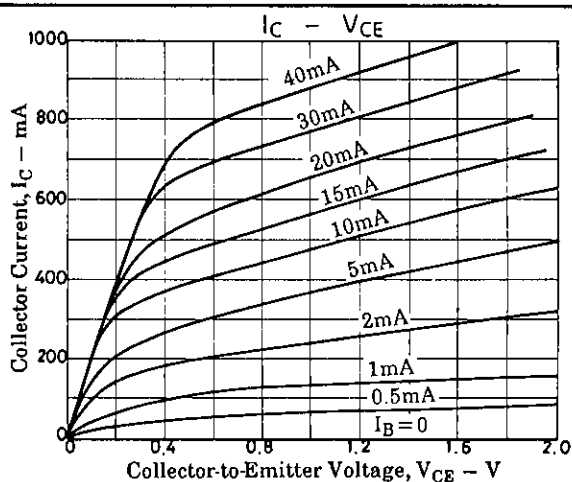
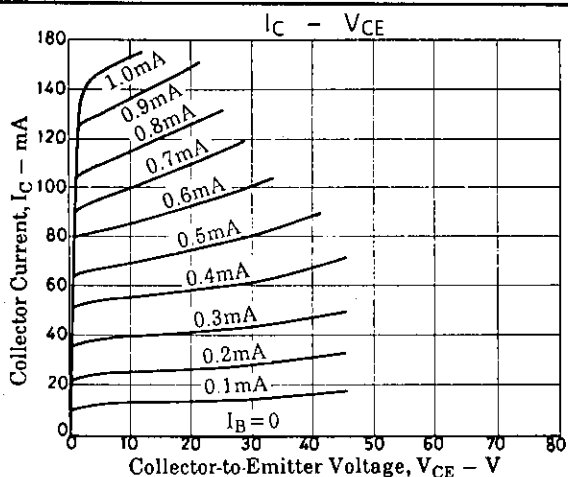


Collector Efficiency Test Circuit

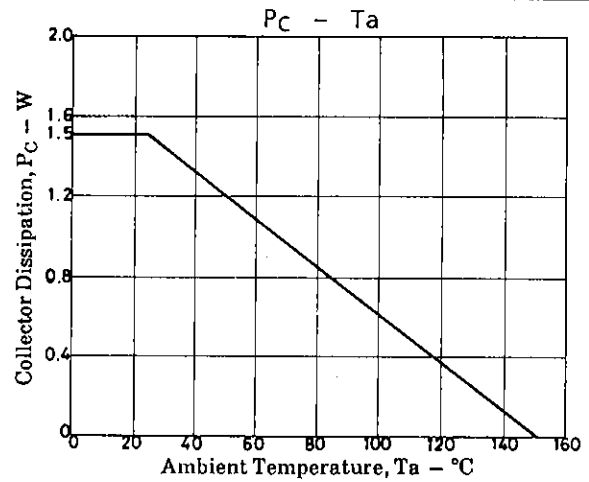
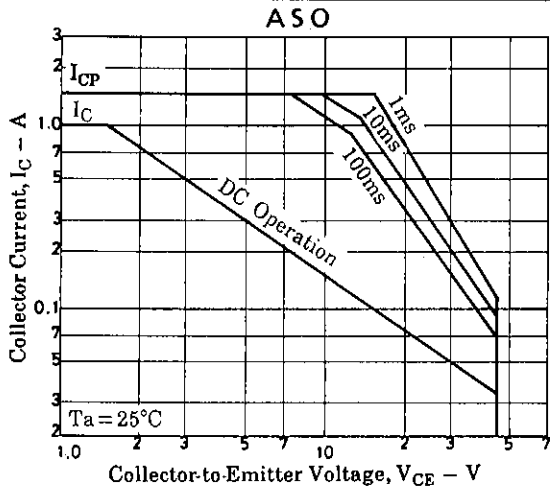


L1: 10 ϕ 0.6 ϕ EC 6T
L2: 10 ϕ 0.6 ϕ EC 12T

2SC4735



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