2SC4873

NPN Epitaxial Planar Silicon Transistor
UHF～S Band low-noise amplifiers and oscillators

TENTATIVE

Features and Applications

- Small noise figure : NF=1.4dB typ (f=1GHz)
- High Power Gain : $|S_{21e}|^2$ = 15dB typ (f=1GHz)
- High cutoff frequency : fT = 10GHz typ
- Small Cob : Cob=0.45pF typ

Information (including circut diagrams and circut 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.

Absolute Maximum Ratings /Ta=25°C

			unit
Collector to Base Voltage	VCBO	16	V
Collector to Emitter voltage	VCEO	8	V
Emitter to Base Voltage	VEBO	1.5	V
Collector Current	IC	20	mA
Collector Dissipation	PC	150	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55～+150	°C

Electrical Characteristics /Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	ICBO	VCB = 10V , IE = 0			1.0	μA
Emitter Cutoff Current	IEBO	VEB = 1V , IC = 0			10	μA
DC Current Gain	hFE	VCE = 5V , IC = 4mA	60※		270※	
Gain-Bandwidth Product	fT	VCE = 5V , IC = 4mA		10		GHz
Output Capacitance	Cob	VCB = 10V , f = 1MHz		0.45	0.8	pF
Forward Transfer Gain	$\|S_{21e}\|^2$	VCE = 5V , IC = 7mA , f=1GHz	12	15		dB
Noise Figure	NF	VCE = 5V , IC = 4mA , f=1GHz		1.4		dB

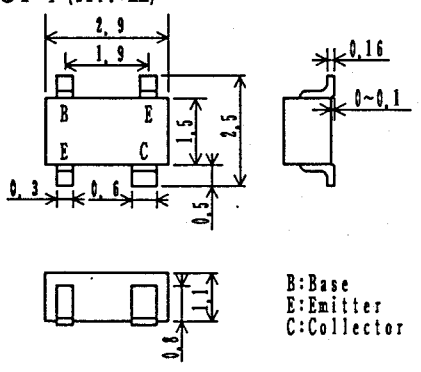
※ The 2SC4873 is classified by 4mA hFE as follows :

60 3 120	90 4 180	135 5 270

Marking : HN
hFE classification : 3 , 4 , 5

Case Outline

CP4 (unit:mm)



B:Base
E:Emitter
C:Collector

Specifications and information herein are subject to change without notice.

SANYO Electric Co.,Ltd. Semiconductor Division
Natsume Bldg., 18-6, 2-chome, Yushima, Bunkyo-ku, TOKYO 113 JAPAN