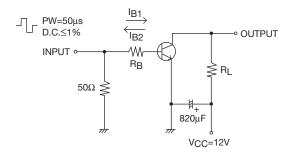
#### Continued from preceding page.

Parameter	Symbol	Conditions	Ratings	Unit
Base Current	IB		300	mA
Collector Dissipation	PC	When mounted on ceramic substrate (450mm <sup>2</sup> ×0.8mm)	1.3	W
Collector dissipation		Tc=25°C	3.5	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit	
Parameter	Syllibol	Conditions	min	typ	max	Utill	
Collector Cutoff Current	ICBO	V <sub>CB</sub> =30V, I <sub>E</sub> =0A			0.1	μΑ	
Emitter Cutoff Current	IEBO	V <sub>EB</sub> =4V, I <sub>C</sub> =0A			0.1	μΑ	
DC Current Gain	hFE	V <sub>CE</sub> =2V, I <sub>C</sub> =100mA	200		560		
Gain-Bandwidth Product	fŢ	V <sub>CE</sub> =10V, I <sub>C</sub> =300mA		500		MHz	
Output Capacitance	Cob	V <sub>CB</sub> =10V, f=1MHz		8		pF	
Collector-to-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	I <sub>C</sub> =0.75A, I <sub>B</sub> =15mA		150	225	mV	
Base-to-Emitter Saturation Voltage	V <sub>BE</sub> (sat)	I <sub>C</sub> =0.75A, I <sub>B</sub> =15mA		0.85	1.2	V	
Collector-to-Base Breakdown Voltage	V(BR)CBO	IC=10μA, IE=0A	40			V	
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	IC=1mA, RBE=∞	30			V	
Emitter-to-Base Breakdown Voltage	V(BR)EBO	I <sub>E</sub> =10μA, I <sub>C</sub> =0A	5			V	
Turn-On Time	ton			35		ns	
Storage Time	tstg	See specified Test Circuit.		205		ns	
Fall Time	tf			30		ns	

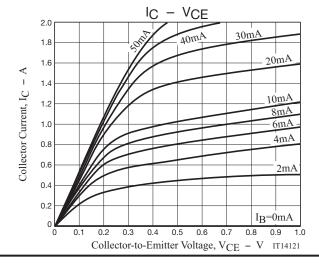
# **Switching Time Test Circuit**

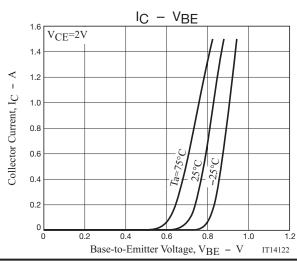


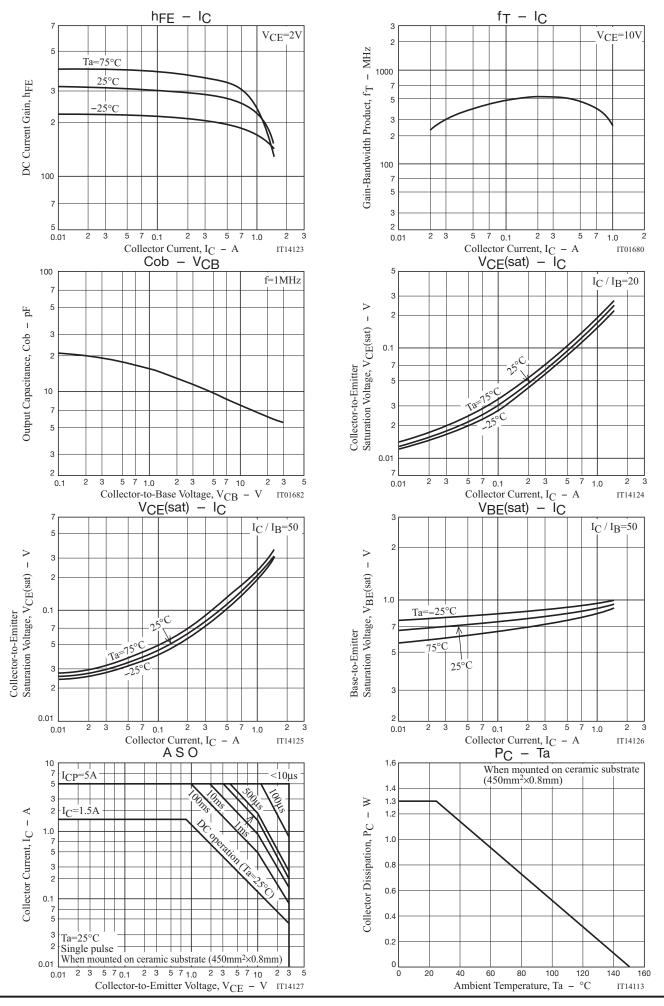
 $I_{C}=20I_{B1}=-20I_{B2}=0.75A$ 

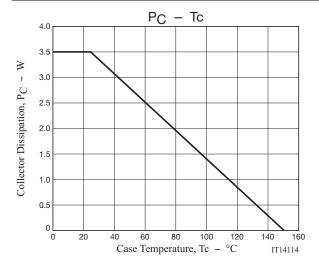
## **Ordering Information**

Device Package		Shipping	memo	
PCP1203-TD-H	PCP	1,000pcs./reel	Pb Free and Halogen Free	







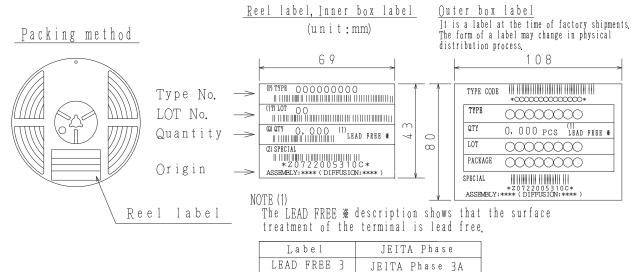


#### **Bag Packing Specification**

#### PCP1203-TD-H

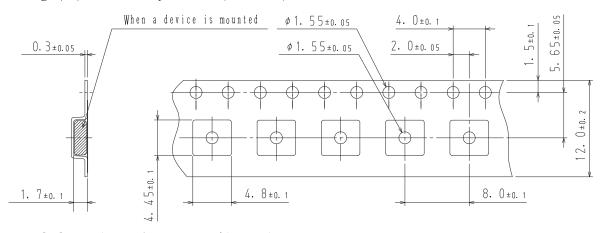
## 1. Packing Format

Package Name	Carrier Tape	Maximum Number of devices contained (pcs)			Packing format		
	Туре	Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)	
PCP	PCP	1, 000	4,000	24,000	4 reels contained	6 inner boxes contained	
					Dimensions:mm (external)	Dimensions:mm (external)	
					183×72×185	440×195×210	



# 2. Taping configuration

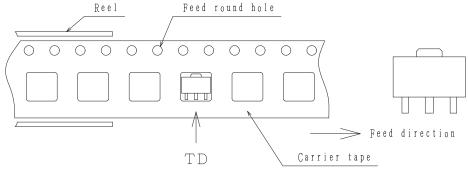
2-1. Carrier tape size (unit:mm)



LEAD FREE 4

JEITA Phase 3

2-2. Device placement direction



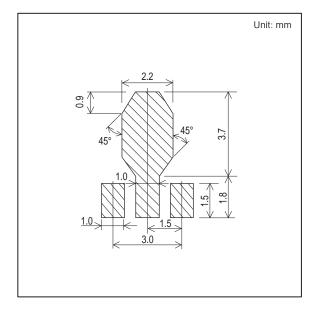
Those with pin 1 index on the feed hole side·····TD

# **Outline Drawing**

PCP1203-TD-H

# Mass (g) Unit 0.058 mm 4. 5±0. 1 1. 6±0. 2 \_ 1.5±0.1\_ 2. 5±0. 1 4. 0±0. 2 1. 0±0. 2 0. 4+0. 08 0. 4±0. 03 0. 5<sup>+0. 05</sup> 1. 5±0. 2 3. O±0. 2 0. 75 0.10 \*1:Lot indication

# **Land Pattern Example**



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