

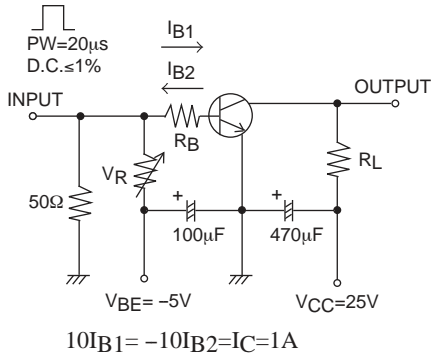


# CPH5504

## Electrical Characteristics at Ta=25°C

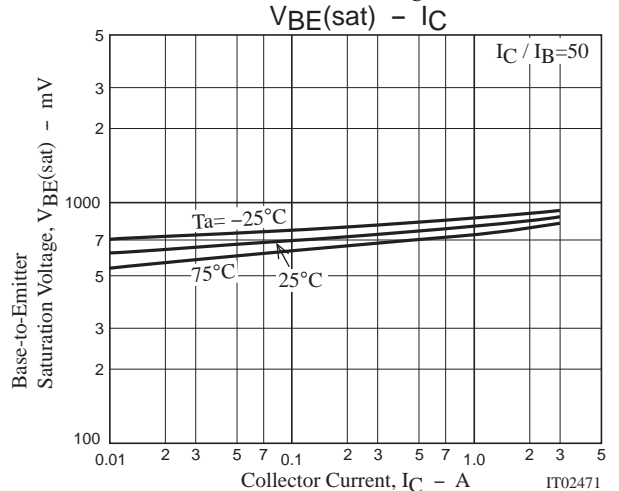
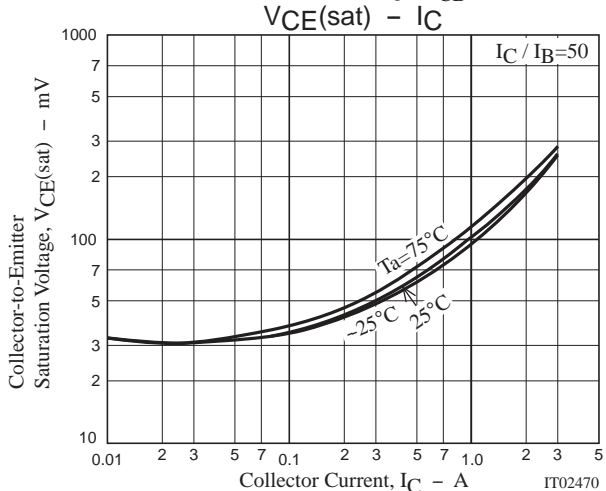
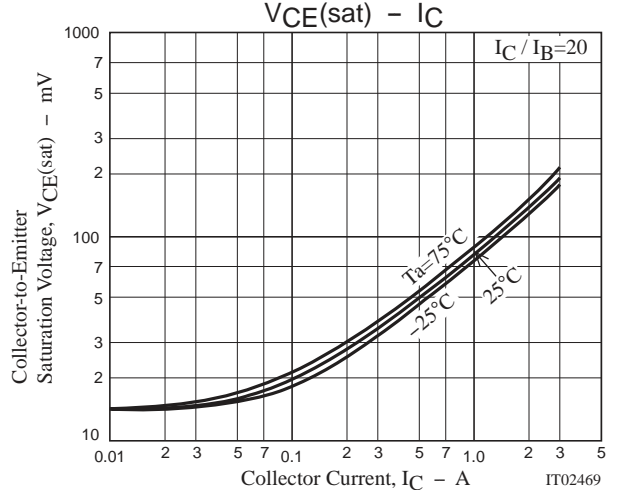
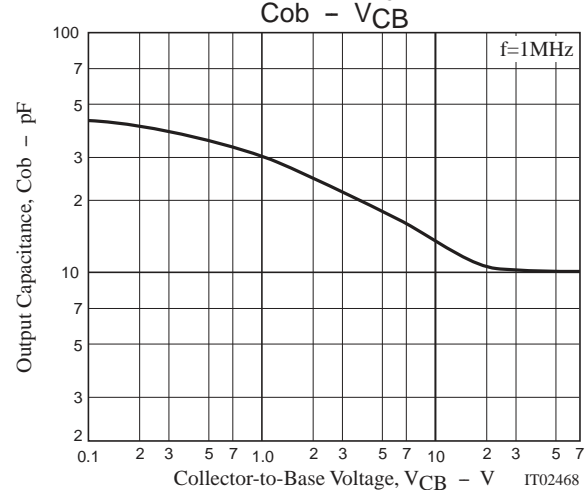
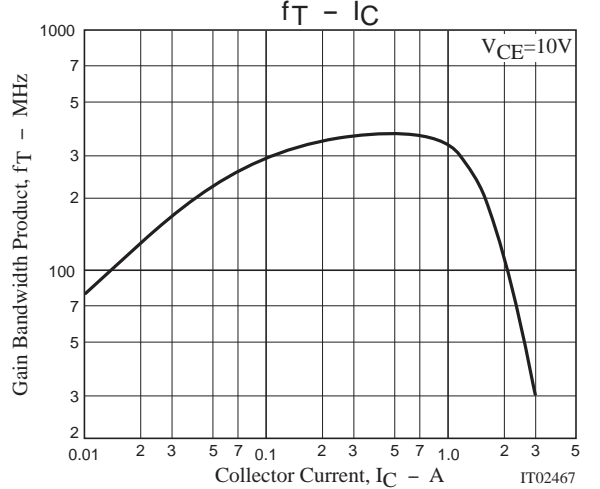
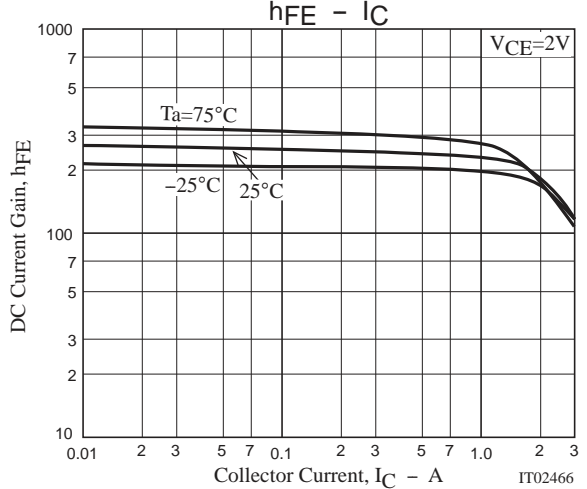
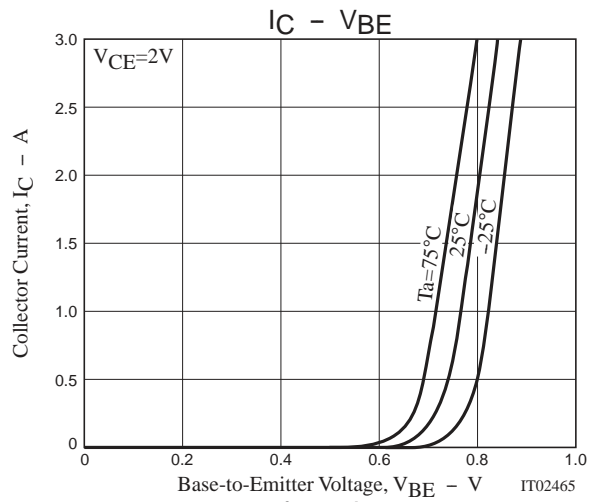
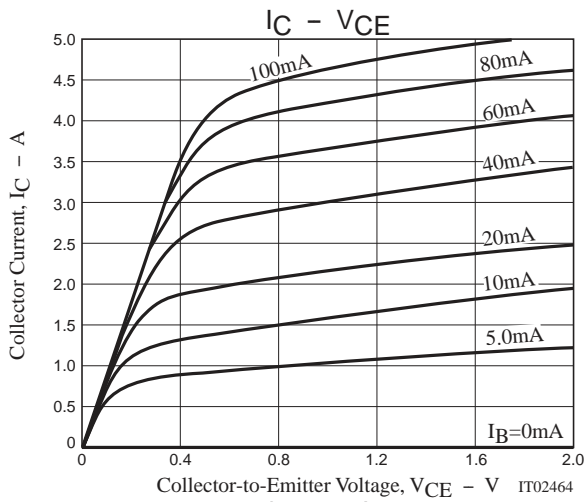
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=40V, I_E=0A$			1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4V, I_C=0A$			1	$\mu A$
DC Current Gain	$h_{FE1}$	$V_{CE}=2V, I_C=100mA$	200		560	
	$h_{FE2}$	$V_{CE}=2V, I_C=3A$	70			
Gain-Bandwidth Product	$f_T$	$V_{CE}=10V, I_C=500mA$		380		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10V, f=1MHz$		13		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A, I_B=50mA$		80	120	mV
		$I_C=2A, I_B=100mA$		140	210	mV
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=2A, I_B=100mA$		0.88	1.2	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0A$	100			V
Collector-to-Base Breakdown Voltage	$V_{(BR)CES}$	$I_C=100\mu A, R_{BE}=0\Omega$	100			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	50			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0A$	6			V
Turn-On Time	$t_{on}$	See specified Test Circuit.		35		ns
Storage Time	$t_{stg}$			300		ns
Fall Time	$t_f$			22		ns

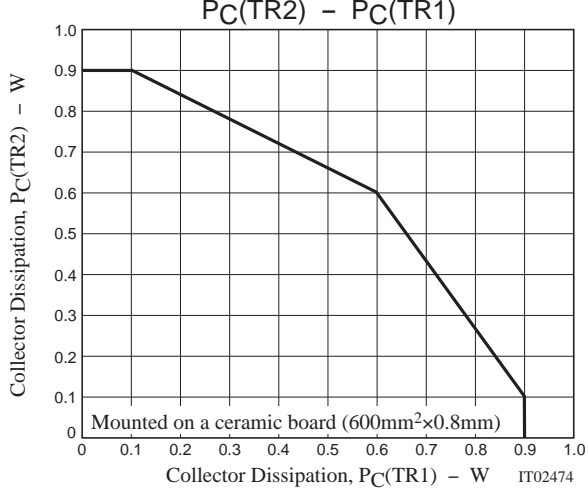
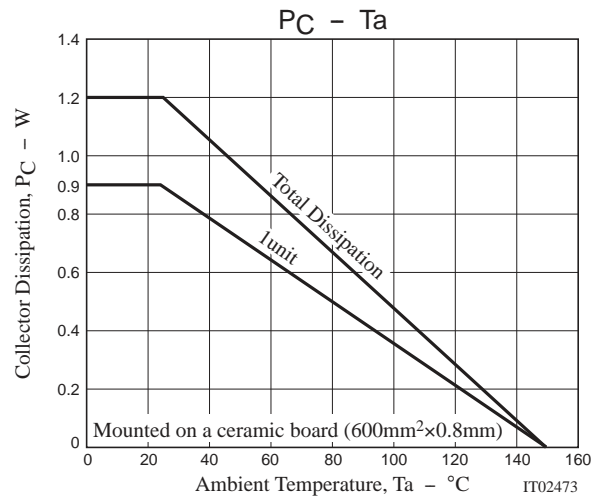
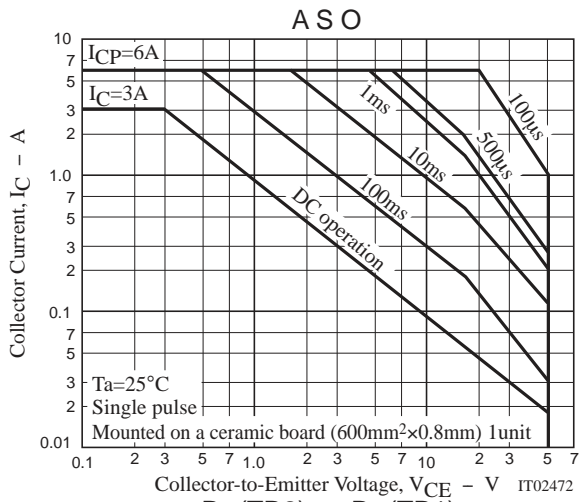
## Switching Time Test Circuit



## Ordering Information

Device	Package	Shipping	memo
CPH5504-TL-E	CPH5	3,000pcs./reel	Pb Free





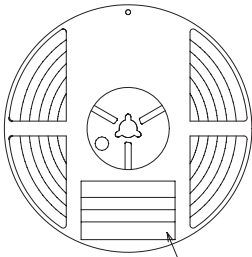
Embossed Taping Specification

CPH5504-TL-E

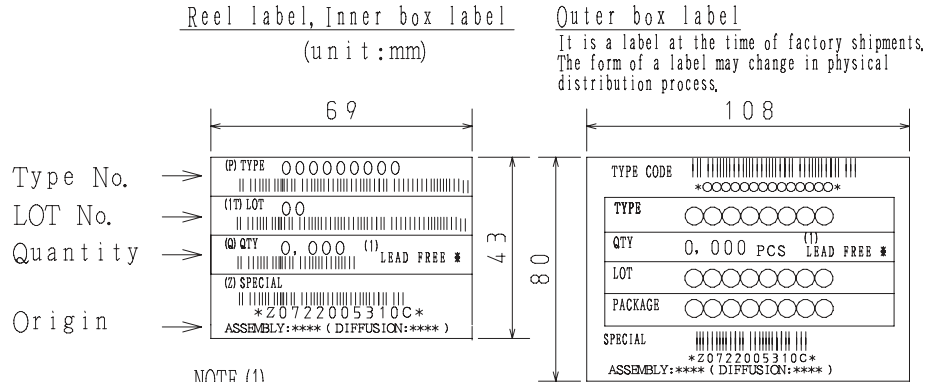
1. Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CPH5	CPH6	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Packing method



Reel label



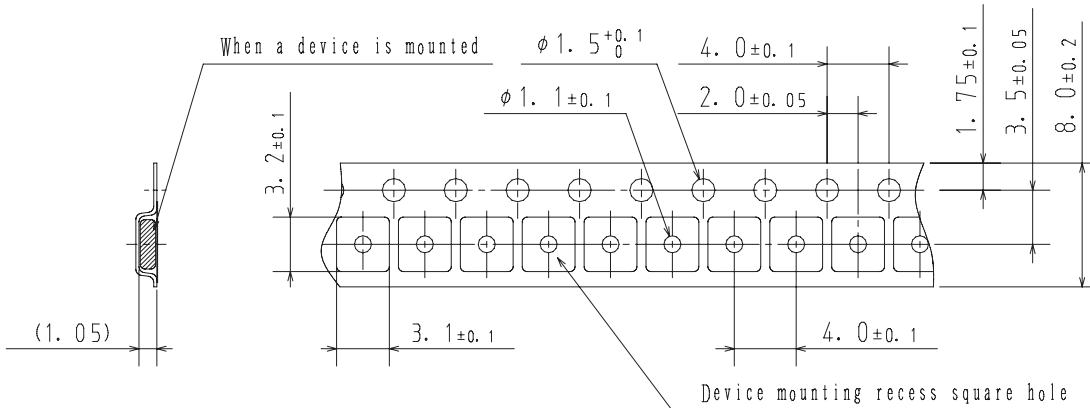
NOTE (1)

The LEAD FREE ⚡ description shows that the surface treatment of the terminal is lead free.

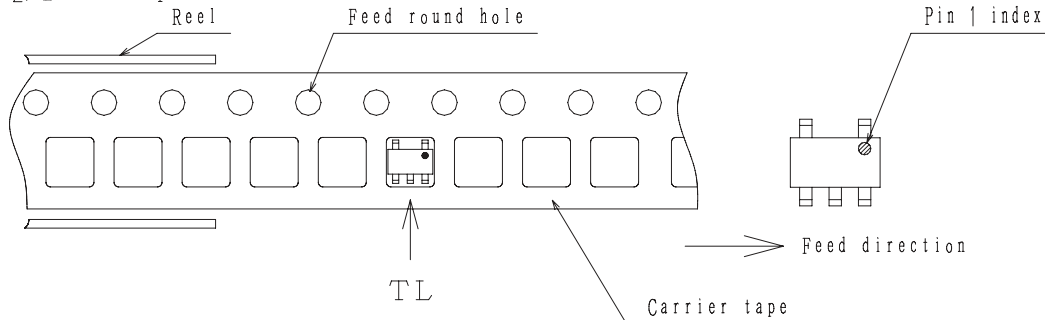
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

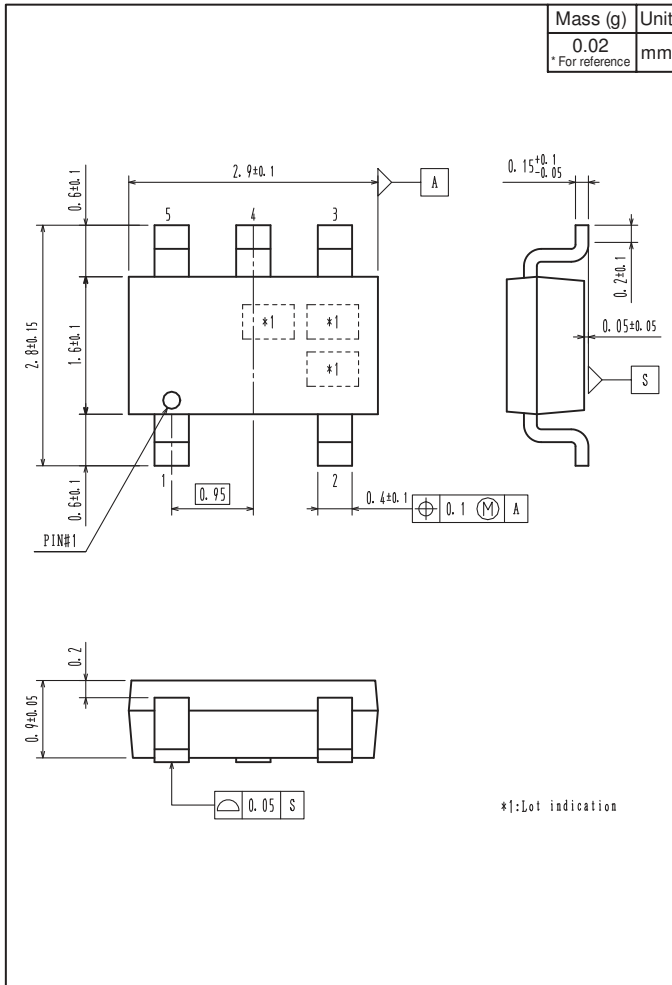


Those with pin 1 index on the feed hole side.....TL

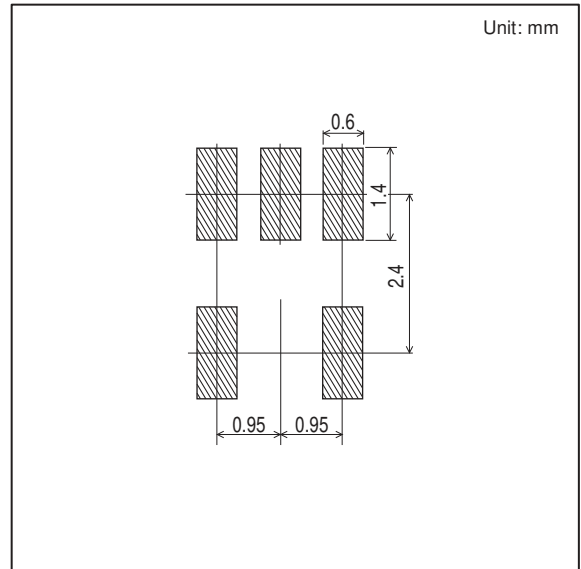
# CPH5504

## Outline Drawing

CPH5504-TL-E



## Land Pattern Example



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