

High power thin film chip terminator

■ PCS series, HPT series

Features

- High power chip terminator using AlN and alumina substrates.
- Efficient heat dissipation enables high power, anti-surge, and durability.
- Easy to mount (wraparound terminal) and are reliable after mounting.
- Thin film does not have innate stress --no fatigue, no impedance change over long period of power cycling.

Applications

- Wireless communication devices, wireless communication modules, wireless base stations.



◆ Part numbering system

HPT 3216 - 50 - T1

Series code(PCS, HPT)

Size : 1005, 1608, 2012, 3216, 5025
6432, 6464, 9464H

*HPT series only

Packaging quantity:
T1(1,000pcs), T5(5,000pcs)

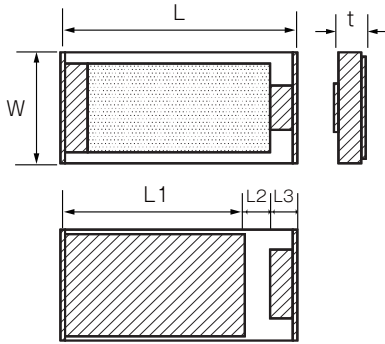
Impedance

◆ Electrical Specification

PCS series (Alumina substrate)							
part number		PCS1005	PCS1608	PCS2012	PCS3216	PCS5025	PCS6432
Rated power		200mW	500mW	1W	2W	5W	10W
VSWR	DC-3GHz	1.2	1.2	1.2	1.2	1.3	1.2
	3.1-5GHz	1.2	1.2	1.3	1.3	1.4	1.5
	5.1-7.5GHz	1.3	1.3	1.3	1.4	1.5	—
	7.6-10GHz	1.3	1.3	1.4	1.5	—	—
	10.1-12.5GHz	1.4	1.4	1.5	—	—	—
	12.6-15GHz	1.5	1.5	—	—	—	—
Operating temperature		-40°C~ +125°C					
Rated operating temperature		+70°C					

HPT series (ALN substrate)								
part number		HPT1608	HPT2012	HPT3216	HPT5025	HPT6432	HPT6464	HPT9464H
Rated power		2.5W	5W	10W	20W	30W	60W	100W
VSWR	DC-3GHz	1.2	1.2	1.2	1.3	1.3	1.3	1.3
	3.1-5GHz	1.2	1.3	1.3	1.5	1.5	—	—
	5.1-7.5GHz	1.3	1.3	1.4	—	—	—	—
	7.6-10GHz	1.3	1.4	1.5	—	—	—	—
	10.1-12.5GHz	1.4	1.5	—	—	—	—	—
	12.6-15GHz	1.5	—	—	—	—	—	—
Operating temperature		-40°C~ +155°C						
Rated operating temperature		+100°C at Terminals						

◆ Dimensions



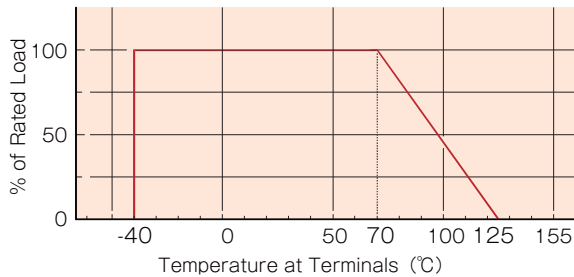
Type	Size (inch)	L	W	L1	L2	L3	t
PCS1005	0402	1.0±0.1	0.5±0.1	0.65±0.1	0.2±0.1	0.15±0.1	0.3±0.1
PCS1608	0603	1.6±0.15	0.8±0.15	1.1±0.15	0.3±0.15	0.2±0.15	0.4±0.1
PCS2012	0805	2.0±0.15	1.25±0.15	1.5±0.15	0.3±0.15	0.2±0.15	0.4±0.1
PCS3216	1206	3.2±0.2	1.6±0.2	2.7±0.2	0.3±0.15	0.2±0.15	0.4±0.1
PCS5025	2010	5.0±0.2	2.5±0.2	4.3±0.2	0.4±0.15	0.3±0.15	0.4±0.1
PCS6432	2512	6.4±0.2	3.2±0.2	5.7±0.2	0.4±0.15	0.3±0.15	0.4±0.1

Type	Size (inch)	L	W	L1	L2	L3	t
HPT1608	0603	1.6±0.15	0.8±0.15	1.1±0.15	0.3±0.15	0.2±0.15	0.4±0.1
HPT2012	0805	2.0±0.15	1.25±0.15	1.5±0.15	0.3±0.15	0.2±0.15	0.4±0.1
HPT3216	1206	3.2±0.2	1.6±0.2	2.7±0.2	0.3±0.15	0.2±0.15	0.4±0.1
HPT5025	2010	5.0±0.2	2.5±0.2	3.6±0.2	0.9±0.15	0.5±0.15	0.65±0.1
HPT6432	2512	6.4±0.2	3.2±0.2	5.5±0.2	0.7±0.15	0.2±0.15	0.65±0.1
HPT6464	2525	6.3±0.2	6.3±0.2	4.9±0.2	0.65±0.15	0.75±0.15	0.65±0.1
HPT9464H	3725	9.4±0.2	6.3±0.2	7.1±0.2	1.15±0.15	1.15±0.15	0.65±0.1

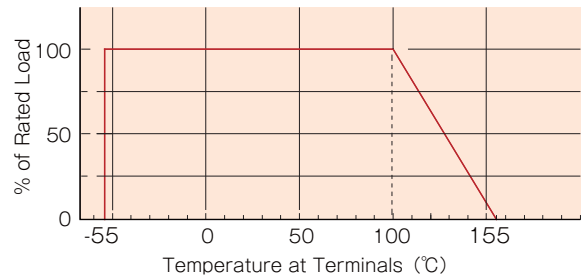
(unit : mm)

◆ Derating Curve

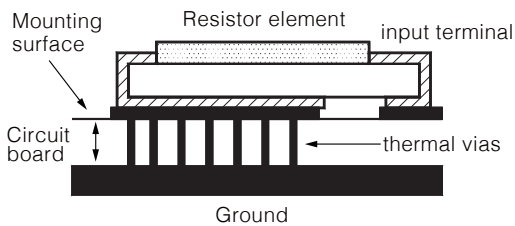
○ PCS series



○ HPT series



◆ Mounting example



The heat is dissipated through the bottom ground surface to the PC board.
Please consider to utilize thermally conductive surface such as with thermal vias.