

High Power Thin Film Chip Terminator

■ PCS Series、 HPT Series

Features

- Small high power chip terminator with aluminum nitride and aluminum oxide substrate
- Efficient heat dissipation provides high power, anti-surge, overload protection.
- Wrap around terminals provide easy and reliable soldering.
- Thin film does not have any innate stress. Therefore, repeated power cycling does not fatigue the element and cause no change in impedance.

Applications

- Wireless base station, wireless communication devices, and high frequency power source



◆ Part numbering system

HPT 3216 - 50 - T1

Series code(PCS, HPT)

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

*HPT series only

Packing quantity:

T=Tape (T1/T5), B=Bulk

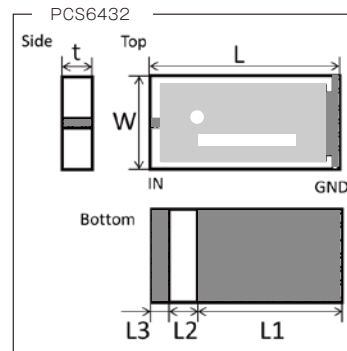
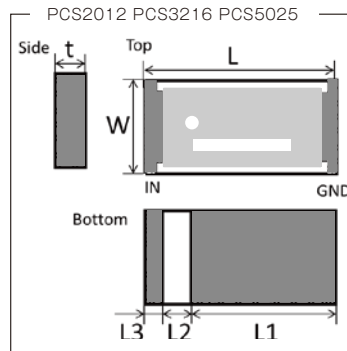
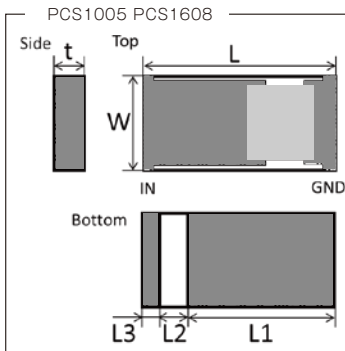
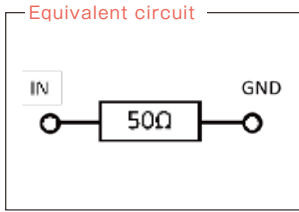
Impedance

◆ Electrical Specification

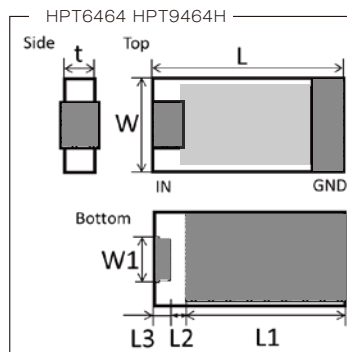
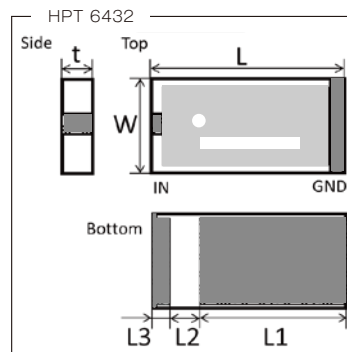
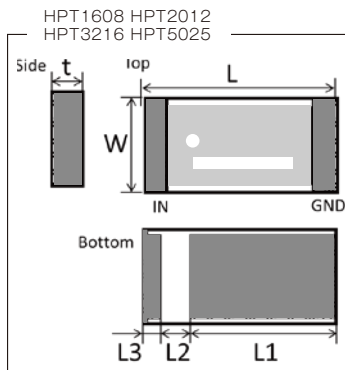
PCS series (Alumina substrate)							
Type		PCS1005	PCS1608	PCS2012	PCS3216	PCS5025	PCS6432
Rated Power		200mW	500mW	1W	2W	5W	10W
VSWR	DC ~ 3GHz	1.2	1.2	1.2	1.2	1.3	1.2
	3.1~5GHz	1.2	1.2	1.3	1.3	1.4	1.5
	5.1~7.5GHz	1.3	1.3	1.3	1.4	1.5	—
	7.6~10GHz	1.3	1.3	1.4	1.5	—	—
	10.1~12.5GHz	1.4	1.4	1.5	—	—	—
	12.6~15GHz	1.5	1.5	—	—	—	—
Operating temperature		-55°C~ +125°C					
Rated operating temperature		+70°C					
Packaging quantity		100pcs/bag (B) 1000pcs/reel (T1) 5000pcs/reel (T5)					

HPT series (ALN substrate)								
Type		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 Terminal						
Packaging quantity		100pcs/bag (B) 1000pcs/reel (T1) 5000pcs/reel (T5)						100pcs/bag (B) 1000pcs/reel (T1)

◆ Dimension, Equivalent Circuit and pin arrangement



Type	Size (inch)	L	W	t	L1	L2	L3
PCS1005	0402	1.00±0.10	0.50±0.10	0.30±0.10	0.65±0.10	0.20±0.10	0.15±0.10
PCS1608	0603	1.60±0.15	0.80±0.15	0.40±0.10	1.10±0.15	0.30±0.15	0.20±0.15
PCS2012	0805	2.00±0.15	1.25±0.15	0.40±0.10	1.50±0.15	0.30±0.15	0.20±0.15
PCS3216	1206	3.20±0.20	1.60±0.20	0.40±0.10	2.70±0.20	0.30±0.15	0.20±0.15
PCS5025	2010	5.00±0.20	2.50±0.20	0.40±0.10	4.30±0.20	0.40±0.15	0.30±0.15
PCS6432	2512	6.40±0.20	3.20±0.20	0.40±0.10	5.70±0.20	0.40±0.15	0.30±0.15



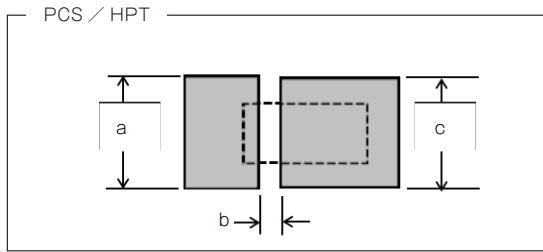
Type	Size (inch)	L	W	t	L1	L2	L3	W1
HPT1608	0603	1.60±0.15	0.80±0.15	0.40±0.10	1.10±0.15	0.30±0.15	0.20±0.15	—
HPT2012	0805	2.00±0.15	1.25±0.15	0.40±0.10	1.50±0.15	0.30±0.15	0.20±0.15	—
HPT3216	1206	3.20±0.20	1.60±0.20	0.40±0.10	2.70±0.20	0.30±0.15	0.20±0.15	—
HPT5025	2010	5.00±0.20	2.50±0.20	0.65±0.10	3.60±0.20	0.90±0.20	0.50±0.15	—
HPT6432	2512	6.40±0.20	3.20±0.20	0.65±0.10	5.50±0.20	0.70±0.15	0.20±0.15	—
HPT6464	2525	6.30±0.20	6.30±0.20	0.65±0.10	4.90±0.20	0.65±0.15	0.75±0.15	3.05±0.20
HPT9464H	3725	9.40±0.20	6.30±0.20	0.65±0.10	7.10±0.20	1.15±0.15	1.15±0.15	3.00±0.20

(unit : mm)

High Power Thin Film Chip Terminator

■ PCS Series、HPT Series

◆ Recommended land patterns (soldering footprints)



Type	a	b	c
PCS1005	0.70	0.20	0.70
PCS1608	1.20	0.30	1.20
PCS2012	1.20	0.45	1.60
PCS3216	2.00	0.45	2.00
PCS5025	2.90	0.55	2.90
PCS6432	3.60	0.55	3.60

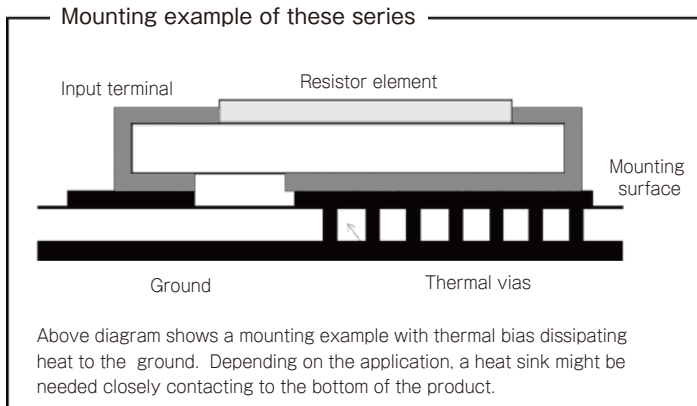
(unit : mm)

Type	a	b	c
HPT1608	1.20	0.40	1.20
HPT2012	1.60	0.40	1.50
HPT3216	2.00	0.40	2.00
HPT5025	2.90	0.90	2.90
HPT6432	3.60	0.70	3.60
HPT6464	3.30	1.15	6.80
HPT9464H	3.30	1.15	6.80

(unit : mm)

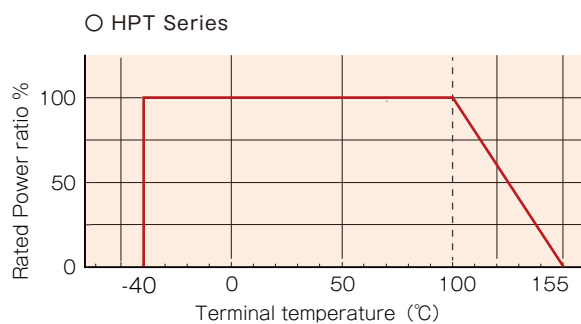
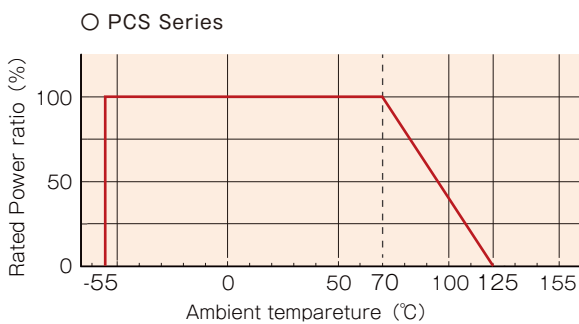
◆ Mounting example

Pay special care to heat dissipation when this product is used at maximum rated power.

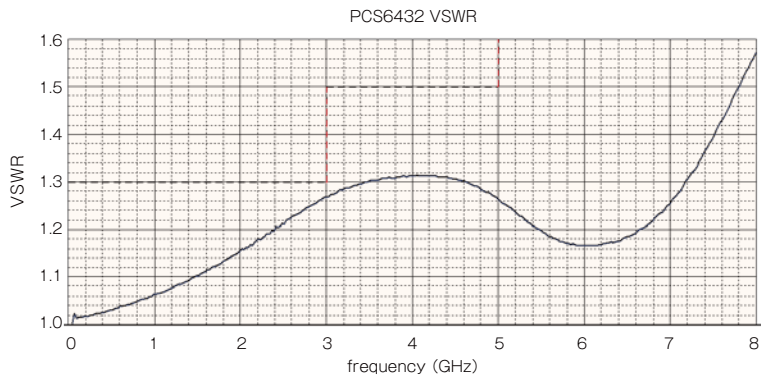
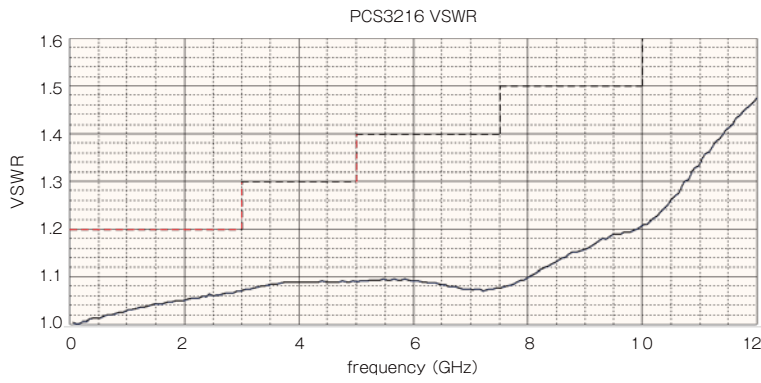
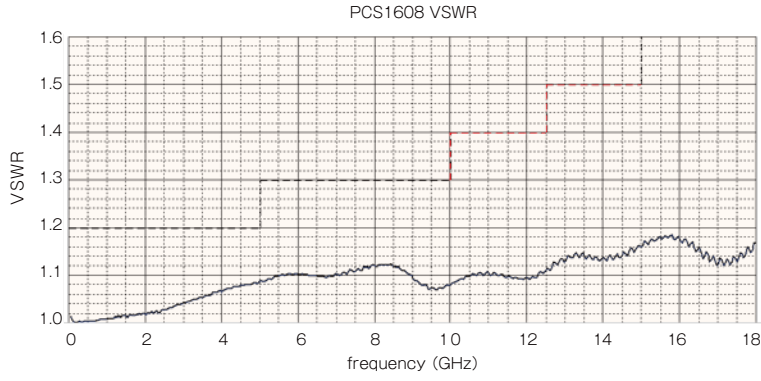


High frequency surface mount components

◆ Derating Curve



◆ High frequency characteristics



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Thin Film Resistors - SMD category](#):

Click to view products by [Susumu manufacturer](#):

Other Similar products are found below :

[M55342K06B34E0RT3](#) [D55342E07B379BR-TR](#) [AR02BTC1872](#) [AR02BTC18R7](#) [AR02BTC3830](#) [AR02BTC4220](#) [AR02BTC4422](#)
[AR02BTC5100](#) [AR02BTC5111](#) [AR02BTC5762](#) [AR02BTC8251](#) [AR02BTC8452](#) [AR03BTC0110](#) [AR03BTC0120](#) [AR03BTC0330](#)
[AR03BTC0390](#) [AR03BTC1102](#) [AR03BTC1103](#) [AR03BTC1201](#) [AR03BTC2000](#) [AR03BTC2201](#) [AR03BTC2203](#) [AR03BTC2490](#)
[AR03BTC3003](#) [AR03BTC3302](#) [AR03BTC3901](#) [AR03BTC4220](#) [AR03BTC4223N](#) [AR03BTC5602](#) [AR03BTC5603](#) [AR03BTC5900](#)
[AR03BTC7500](#) [AR03BTC9100](#) [AR03BTC9103](#) [AR03BTC9760](#) [AR05BTC0280](#) [AR05BTC1000](#) [AR05BTC1100](#) [AR05BTC1201](#)
[AR05BTC1202](#) [AR05BTC1300](#) [AR05BTC14R3](#) [AR05BTC1500](#) [AR05BTC1523](#) [AR05BTC1620](#) [AR05BTC1622](#) [AR05BTC1623](#)
[AR05BTC1760](#) [AR05BTC1800](#) [AR05BTC1823](#)