

# Ultra High Power Thick Film (SP Series)



## Alternative for:

Bourns CHP  
Vishay RCP



## Features:

- High Power Rating up to 6W
- Surge Withstanding Capability
- AEC-Q200 Compliant
- Suitable for both wave & reflow soldering
- SP12 available in KIT packaging (E-24)
- Product design patent # : I566261



## Application:

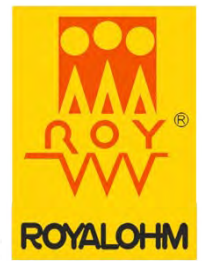
- EV Charging system
- Lighting converter/beacon
- Automotive
- Consumer electronics
- LCD back light
- Power supply/tools
- Medical
- Battery Chargers/BMS
- Telecom Equipment
- Digital Cameras
- Computer & Wi Fi modules
- Warning System & Security
- Relay
- Inverter



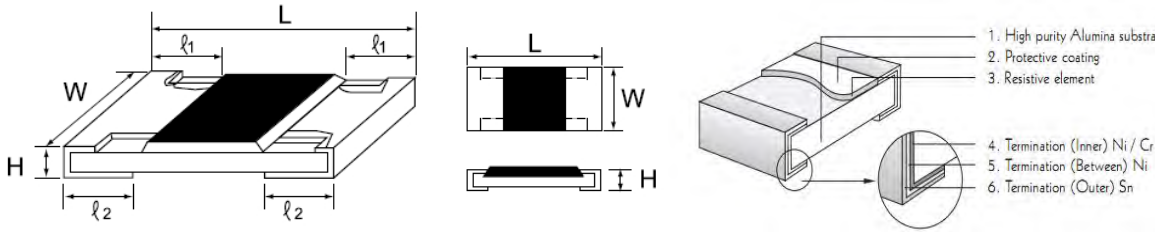
IATF 16949  
ISO 14001



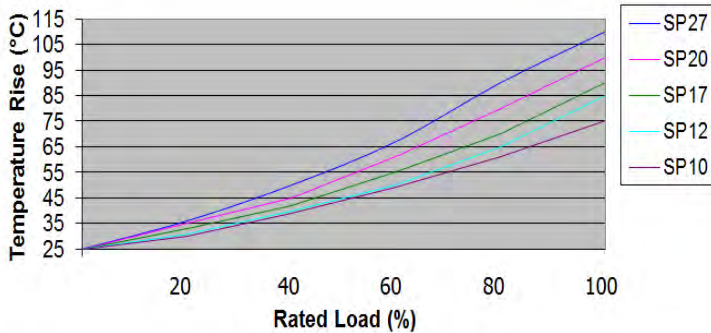
# Ultra High Power Thick Film (SP Series)



## Dimension

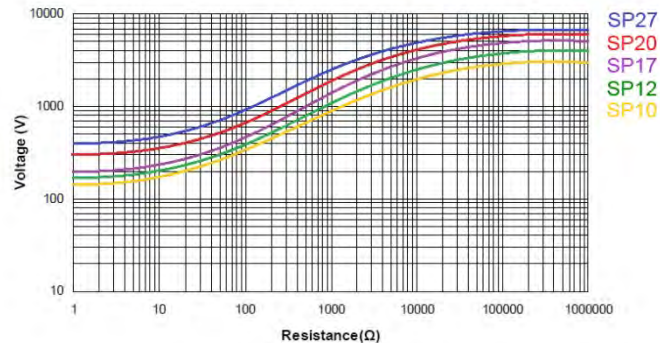


## Heat Rise Chart



## Surge Performance

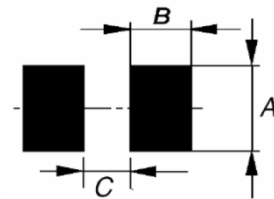
SP Series 1.2/50us Lightning Surge



## Power Rate Comparison

Size	Power (70°C)			Resistance Range 1%,5%
	Standard	HP	SP	
0402	1/16W	1/10W	-	1Ω~10M
0603	1/10W	1/5W	-	1Ω~10M
0805	1/8W	1/3W	-	1Ω~10M
1206	1/4W	1/2W	-	1Ω~10M
2010	3/4W	1W	2W	1Ω~10M
2512	1W	2W	3W	1Ω~10M
2817	-	-	4W	1Ω~10M
4320	-	-	5W	1Ω~10M
4527	-	-	6W	1Ω~10M

## Recommended Solder Pad



Size	Dimension(mm)		
	A	B	C
SP10	3.00	2.00	3.90
SP12	3.70	2.80	2.70
SP17	4.70	3.30	3.40
SP20	5.50	3.90	6.10
SP27	7.20	4.00	6.50

### 4 Layer PCB specification:

- 1) Outside 2 layers(Top and Bottom)with copper foil thickness at 2oz.
- 2) Inside 2 layers(middle layers)with copper foil thickness at 4oz.



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