

#### PSI – EOL PSE – NOT RECOMMENDED FOR NEW DESIGN RECOMMENDED REPLACEMENT PSJ2, TLR3AP

### chip type power shunt resistor





### features

- Smooth current flow, suitable for large current detecting
- Flat structure, applicable for strong mounting
- Automatic mounting machines are applicable
- Products with lead-free terminations meet EU RoHS and China RoHS requirements
- AEC-Q200 Qualified

## dimensions and construction



Туре	Resist.	<b>Dimensions</b> inches ( <i>mm</i> )					
(Inch Size Code)	<b>(</b> Ω <b>)</b>	L	W	d	t		
PSI	3.0m	.394±.010 (10.0±0.25)	.205±.010 (5.2±0.25)				
(3920)	4.0m				$(0.7 \pm 0.25)$		
PSE (2525)	0.5m, 1.0m		.252±.010 (6.4±0.25)		.026±.010 (0.65±0.25)		
	1.5m, 2.0m	(6.4±0.25)			.019±.010 (0.50±0.25)		

## ordering information



For further information on packaging, please refer to Appendix A.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.



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# applications and ratings

Part Designation	Power Rating	T.C.R. (ppm/°C)	Resistance Range		Rated Terminal Part	Operating Temperature
Designation	nating	Max.	F: ±1%	J: ±5%	Temperature	Range
PSI	ЗW	±50	$3m\Omega$ , $4m\Omega$		+105°C	
	3W		0.5mΩ, 1.0mΩ 1.5mΩ, 2.0mΩ	0.5mΩ, 1mΩ, 1.5mΩ, 2mΩ	+105°C	-65°C to +155°C
PSE	5W	±150			0.5mΩ, 1mΩ: +105°C 1.5mΩ: 85°C 2mΩ: +70°C	

**PSI – EOL** 

# environmental applications



For resistors operated at a terminal part temperature of described for each size or above, a power rating shall be derated in accordance with the derating curve. Please refer to "Introduction of the derating curve based on the terminal part temperature" in the beginning of our catalog before use.

#### **Performance Characteristics**

	Requirement $\Delta$ R ±%			
Parameter	Limit	Typical	Test Method	
T.C.R.	Within specified T.C.R.		+25°C/+100°C	
Overload (Short time)	±0.2%: PSI ±0.5%: PSE	±0.1%: PSI ±0.2%: PSE	15W for 5 seconds	
Resistance to Solder Heat	±0.5%	±0.1%	$260^{\circ}C \pm 5^{\circ}C$ , 15 seconds $\pm$ 1 second	
Rapid Change of Temperature	±0.5%	±0.2%	-55°C (30 minutes), +125°C (30 minutes), 1,000 cycles	
Moisture Resistance	±0.5%	±0.2%	85°C ± 2°C, 85% RH, 1000 hours, 10% Bias	
Endurance at and Less of Terminal Part Temperature	±1.0%	±0.2%: PSI ±0.6%: PSE	Terminal part temperature: 105°C (PSI, PSE (3W), PSE (5W) 0.5m, 1.0m) +85°C (PSE (5W) 1.5m) +70°C (PSE (5W) 2.0m), 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle	
Low Temperature Exposure	±0.5%	±0.02%: PSI ±0.1%: PSE	-65°C, 96 hours	
High Temperature Exposure	±1%	±0.4%: PSI ±0.6%: PSE	+155°C, 1,000 hours	

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