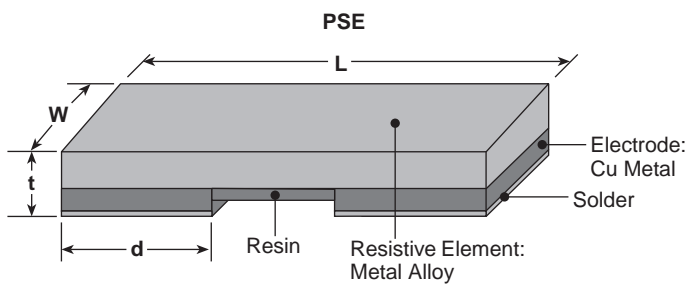


features

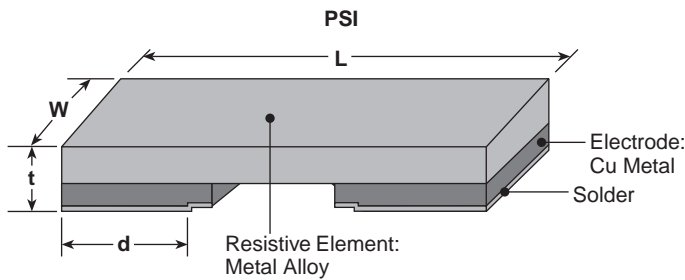
- Smooth current flow, suitable for large current detecting
- Flat structure, applicable for strong mounting
- Automatic mounting machines are applicable
- Products with lead-free terminations meet EU RoHS and China RoHS requirements
- AEC-Q200 Qualified

current sense

dimensions and construction



| Type (Inch Size Code) | Resist. (Ω) | Dimensions inches (mm) | | | |
|--------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|
| | | L | W | d | t |
| PSI (3920) | 3.0m | .394±.010 (10.0±0.25) | .205±.010 (5.2±0.25) | .079±.010 (2.0±0.25) | .028±.010 (0.7±0.25) |
| | 4.0m | | | | |
| PSE (2525) | 0.5m | .252±.010 (6.4±0.25) | .252±.010 (6.4±0.25) | .087±.010 (2.2±0.25) | .026±.010 (0.65±0.25) |
| | 1.0m | | | | .019±.010 (0.50±0.25) |
| | 1.5m, 2.0m | | | | |



ordering information

| | | | | | |
|-----------|---|-----------------------------------|--|--|-------------------------------|
| PS | I | D | TEB | 3L00 | F |
| Type | Power Rating I: 3W E: 3W E: 5W | Termination Material D: SnAgCu | Packaging TE: embossed plastic (PSE: 2,000 pieces/reel) TEB: embossed plastic (PSI: 3,000 pieces/reel) | Nominal Resistance ±1%: 4 digits ±5%: 3 digits All values less than 0.1 Ω (100m Ω) are expressed in m Ω with "L" as decimal Ex: 1m Ω = 1L00 | Tolerance F: ±1% J: ±5% |

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

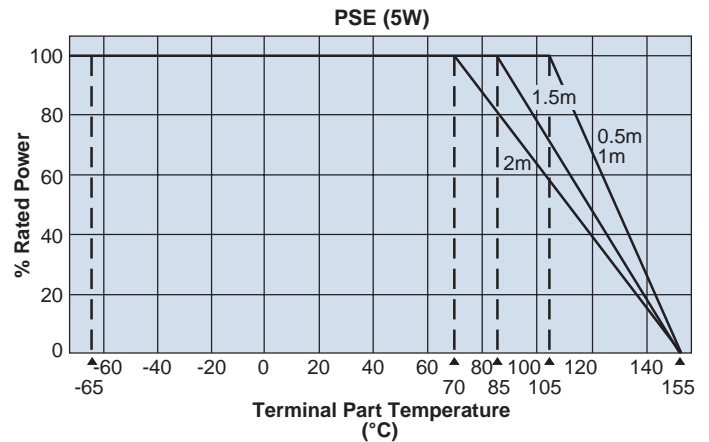
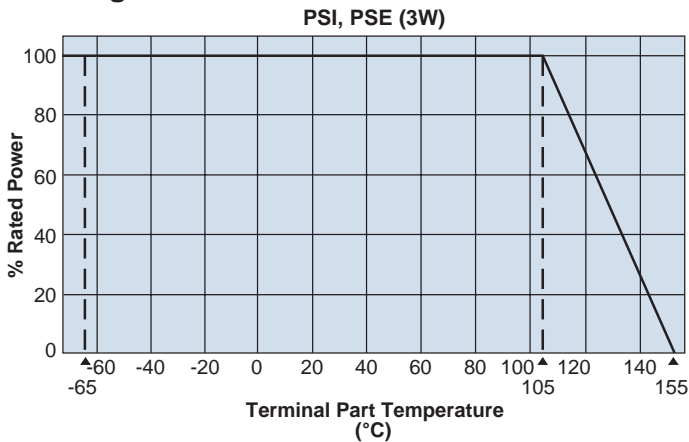
current sense

applications and ratings

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

environmental applications

Derating Curve



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

| Parameter | Requirement $\Delta R \pm\%$ | | Test Method |
|--|------------------------------|---------------------------|---|
| | Limit | Typical | |
| 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°C ± 5°C, 15 seconds ± 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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