





features

- Type Z are conformal coated
- Type J are molded
- Suitable for automatic machine insertion
- Size compatible with 1/8, 1/4 and 1/2 watt resistors
- Marking: Type Z are tan color, single black band identifier Type J are black, no marking
- Products with lead-free terminations meet EU RoHS and China RoHS requirements

dimensions and construction



| | Dimensions inches (mm) | | | | | |
|-------|---|-----------------------|---|-----------------------|---|------------------------|
| Туре | L (ref.) ¹ | C (max.) | D | d (nom.) | Standard | Long |
| Z16 | .126±.008 (3.2±0.2) | . 134 (3.4) | .067 +.008 004 (1.7 +0.2 -0.1) | .018 (0.45) | .551 Min. ² .787 Min (14.0 Min.) (20.0 Min | .787 Min. ³ |
| Z25 | .240±.02 (6.1±0.5) | .280 (7.1) | .091±.012 (2.3±0.3) | .024 (0.6) | | (20.0 1/1111.) |
| Z25Y | .228 (5.8) | | .087 +.016 008 (2.2 +0.4) -0.2) | | 1.18 ^{+.118} ¹⁶ (30.0 ^{+3.0}) | |
| J1/6Z | .134 ^{+.004} 008 (3.4 ^{+0.1} -0.2) | — | .067±.008 (1.7±0.2) | .020 (0.5) | 1.18±.118 | |
| J1/4Z | .256±.02 (6.5±0.5) | | .091 ⁺⁰ 012 (2.3 ⁺⁰ _{-0.3}) | . 024 (0.6) | (30.0±3.0) | |

¹ Lead length changes depending on taping and forming type.

² Forming code S is applied for bulk type.

³ Long type is custom-made.

ordering information

| Z16 | С | T52 | Α |
|-------|----------------------|--------------------|-----------|
| Туре | Termination Material | Taping and Forming | Packaging |
| Z16 | C: SnCu | T26, T52 | A: Ammo |
| Z25 | | | R: Reel |
| Z25Y | | | |
| J1/4Z | | | |
| J1/6Z | | | |

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

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use. 11/27/18

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applications and ratings

| Part Designation | Maximum Amperage | Minimum Dielectric Withstanding Voltage | Resistance | Rated Ambient Temperature | Operating Temperature Range |
|---------------------|---------------------|--|----------------------|---------------------------------|-----------------------------------|
| Z16 | 1.5A | 300V | | | |
| Z25 | 2.5A | 500V | 20m Ω or less | +70°C | -55°C to +155°C |
| Z25Y | 15A | 500V | | | |

| Part Designation | Maximum Allowable Current | Rated Ambient Temperature | Operating Temperature Range | |
|---------------------|------------------------------|---------------------------------|-----------------------------------|--|
| J1/6ZC | 8A | . 70% | -55°C to +125°C | |
| J1/4ZC | 10A | +70°C | | |

environmental applications

Derating Curve



For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with the above derating curve.

Performance Characteristics

| Parameter | Requirement | Test Method JIS C5201-1 | |
|-----------------------------|---|--|--|
| Resistance | | Measuring points are 10mm ± 1mm from the end cap | |
| Resistance to Solder Heat | Less than $20m\Omega$ | Terminal except 3mm shall be immersed in the solder, $350^{\circ}C \pm 5^{\circ}C$, 3.5 seconds ± 0.5 second | |
| Solderability | 90% coverage minimum | $235^{\circ}C \pm 5^{\circ}C$, 2 seconds ± 0.5 second | |
| Terminal Strength | No mechanical damages | (Direct Load) Z16: 5N, 30 seconds, Z25: 10N, 30 seconds (Twist Test) 360°, 5 times (Bending Test) 5N, 90°, 2 times (Z16: 2.5N) | |
| Rapid Change of Temperature | | -55°C (30 minutes)/+85°C (30 minutes), 5 cycles | |
| Moisture Resistance | Less than $20m\Omega$ | 40°C ±2°C, 90-95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle | |
| Endurance @ 70°C | | 70°C ±2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle | |
| Solvent Resistance | No visible damages to protective coating and marking | Isopropyl alcohol with ultrasonic cleansing for 2 minutes Power: 0.3W/cm ² , f: 28kHz, Temperature: 35°C ± 5°C | |

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