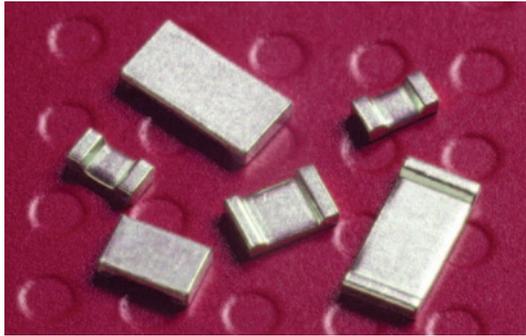


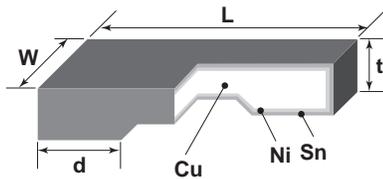
current sense



### features

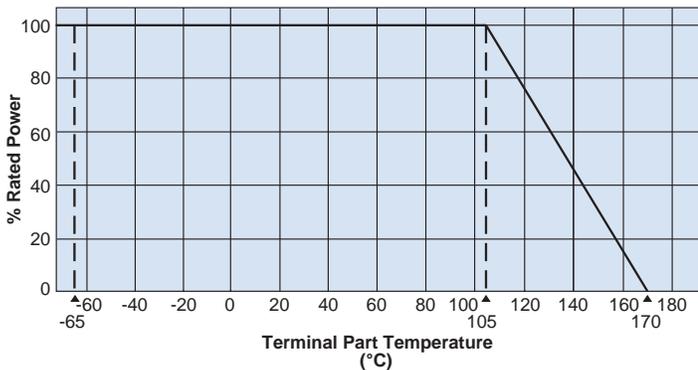
- SMD type of small size, high rated current zero ohm jumper
- Low height suitable for use of small equipment such as mobile phone
- Suitable for reflow soldering (Not suitable for flow soldering)
- Products meet EU RoHS requirements
- AEC-Q200 Qualified

### dimensions and construction



Size Code	Dimensions inches (mm)			
	L	W	d	t
TLRZ1E (0402)	.039±.004 (1.00±0.10)	.020±.004 (0.50±0.10)	.008±.004 (0.20±0.10)	.016±.002 (0.40±0.05)
TLRZ1J (0603)	.063±.004 (1.60±0.10)	.031±.004 (0.80±0.10)	.012±.004 (0.30±0.10)	.020±.002 (0.5±0.05)
TLRZ2A (0805)	.079±.004 (2.00±0.10)	.049±.004 (1.25±0.10)	.012±.004 (0.30±0.10)	
TLRZ2B (1206)	.126±.004 (3.20±0.10)	.063±.004 (1.60±0.10)	.012±.004 (0.30±0.10)	

### Derating Curve



When the terminal part temperature of the resistor exceeds the rated part temperature, the power shall be derated according to the derating curve. For more details, please visit [www.koaspeer.com](http://www.koaspeer.com) and go to "Resources," then "Technical Information," and select "[Derating Curves – Caution & Terms.](#)"

### ordering information

<b>TLRZ</b>	<b>1E</b>	<b>T</b>	<b>TB</b>
Type	Current Rating	Termination Material	Packaging
TLRZ	1E: 10A 1J: 26A 2A: 31.6A 2B: 50A	T: Sn	TB: 2mm pitch pressed paper (TLRZ1E only) TD: 4mm pitch punch paper

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

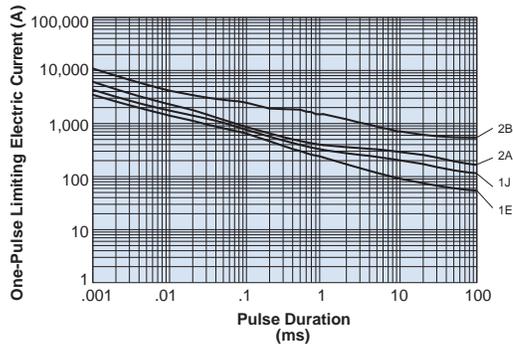
**applications and ratings**

Part Designation	Current Rating	Standard Resistance (Ω)	Rated Terminal Part Temperature	Operating Temperature Range
TLRZ1E	10A	0.5m max.	105°C and less	-65°C to +170°C
TLRZ1J	26A	0.2m max.	105°C and less	
TLRZ2A	31.6A	0.2m max.	105°C and less	
TLRZ2B	50A	0.2m max.	105°C and less	

current sense

**environmental applications**

**One-Pulse Limiting Electric Current**



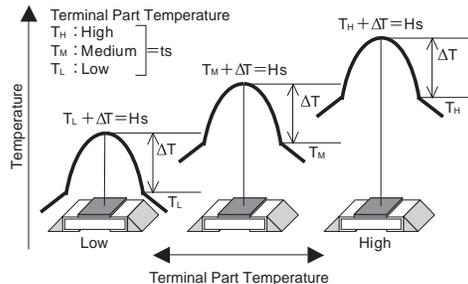
Please ask us about the resistance characteristic of continuous applied pulse.  
The pulse endurance values are not assured values, so be sure to check the products on actual equipment when you use them.

**Thermal Resistance**

Type	Size	Rth
TLRZ	1E	<0.5°C/W
	1J	
	2A	
	2B	

$R_{th} = (H_s - t_s) / \text{Power}$

Regarding the temperature rise, the value of the temperature varies per conditions and board for use since the temperature is measured under our measuring conditions. Please refer to us before use.



The temperature of the resistor will increase the same  $\Delta T$  from the standard terminal part temperature regardless of the ambient temperature when the same power is applied. This is because there is hardly any heat dissipation from the resistor surface to the ambient air.

**Performance Characteristics**

Parameter	Requirement (Δ R %)		Test Method
	Limit	Typical	
Resistance	1E: Max 0.5mΩ 1J/2A/2B: Max 0.2mΩ	1E: Max 0.25mΩ 1J/2A/2B: Max 0.15mΩ	25°C
Overload (Short time)			1E: 20A; 1J/2A: 40A; 2B: 80A for 5 seconds
Resistance to Solder Heat			260°C ± 5°C, 10 ~ 12 seconds
Rapid Change of Temperature			-55°C (30 minutes), +155°C (30 minutes), 1000 cycles
Moisture Resistance			85°C, 85%RH, 1E: 1A; 1J/2A: 2A; 2B: 4A, 1000 hours
Endurance of Rated Terminal Part Temperature			Terminal part temperature: 105°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Low Temperature Exposure			-65°C, 1000 hours
High Temperature Exposure			170°C, 1000 hours

Note: Please contact factory for the TLRZ Performance Characteristics

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

9/11/23