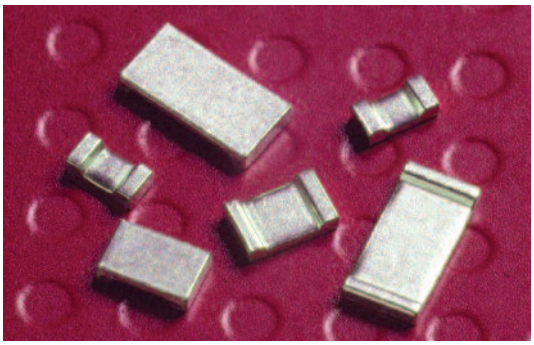
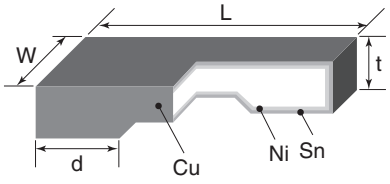


features

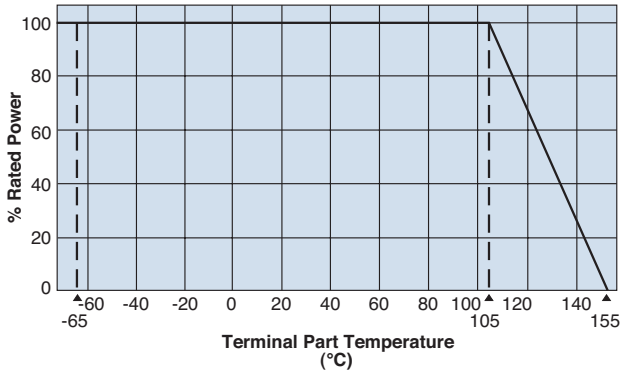
- SMD type of small size, metal plate low resistance resistor for current detection
- Low height suitable for use of small equipment such as mobile phone
- High reliability and performance with T.C.R ±100×10^{-6}/K
- Suitable for reflow soldering (Not suitable for flow soldering)
- Products meet EU RoHS requirements
- AEC-Q200 Qualified

dimensions and construction



Size Code	Resistance	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±0.005)
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



For resistors operated at an ambient temperature of 105°C or above, a power rating shall be derated in accordance with the above derating curve.

ordering information

TLRZ	1E	T	TP
Type	Power Rating	Termination Material	Packaging
TLRZ	1E: 10A 1J: 26A 2A: 31.6A 2B: 50A	T: Sn	TB: 7" pitch pressed paper (TLRZ1E only) TD: 7" 4mm pitch punch paper

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

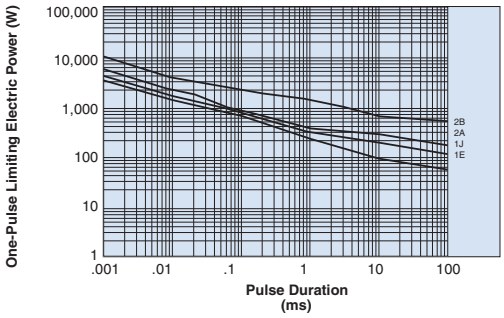
10/26/18

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	-55°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	

environmental applications

One-Pulse Limiting Electric Power



The maximum applicable voltage is equal to the max. overload voltage.

Please ask us about the resistance characteristic of continuous applied pulse.

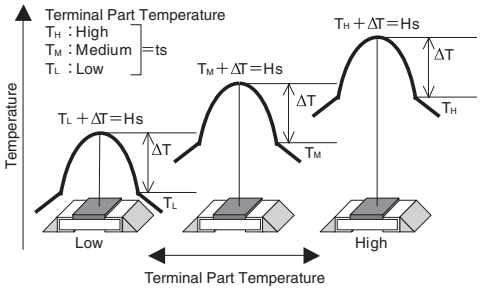
The pulse endurance values are not assured values, so be sure to check the products on actual equipment when you use them.

Thermal Resistance

Type	Size	Rth
TLRZ	1E	≠0°CW
	1J	
	2A	
	2B	

Rth=(Hs-ts)/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 ⊿T from the standard terminal part temperature regardlless 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 % Limit	Requirement Δ R % Typical	Test Method
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			-55°C, 1000 hours
High Temperature Exposure			155°C, 1000 hours

Note: Please contact factory for the TLRZ Performance Characteristics

11/22/19