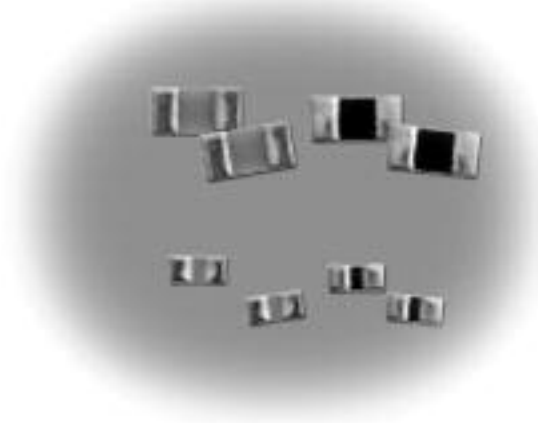
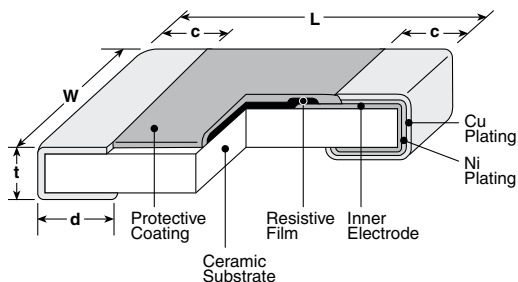


### features

- Interlayer embedding in the multilayer substrate is applicable from the height of 0.13 to 0.14mm
- Cu via hole connection is applicable by the Cu electrode



### dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm)				
	L	W	c	d	t
<b>1H</b> (0201)	.024±.001 (0.6±0.03)	.012±.001 (0.3±0.03)	.009±.001 (0.23±0.03)	.009±.001 (0.23±0.03)	.005±.001 (0.13±0.02)
<b>1E</b> (0402)	.039±.002 (1.0±0.05)	.020±.002 (0.5±0.05)	.011±.002 (0.28±0.05)	.011±.002 (0.28±0.05)	.006±.001 (0.14±0.03)

New Part #	XR73H	1E	U	TWL	1001	F
Type	XR73B XR73H	Power Rating 1H, 1E: 0.063W	Termination Material U: CU	Packaging TWL: 2mm pitch plastic embossed TWA: 1mm pitch plastic embossed (1H only) For further information on packaging, please refer to Appendix A	Nominal Resistance ±1%: 3 significant figures + 1 multiplier "R" indicates decimal on value <100Ω ±5%: 2 significant figures + 1 multiplier "R" indicates decimal on value <10Ω	Resistance Tolerance F: ±1% J: ±5%

New Part #	XR73Z	1E	U	TWL
Type	XR73Z	Power Rating 1H, 1E: 1A	Termination Material U: CU	Packaging TWL: 2mm pitch plastic embossed TWA: 1mm pitch plastic embossed (1H only) For further information on packaging, please refer to Appendix A

## applications and ratings

### XR73B, XR73H

Part Designation	Power Rating*	Rated Ambient Temp.	T.C.R. (x10 <sup>-6</sup> /K) Max.	Resistance Range		Absolute Maximum Working Voltage	Absolute Maximum Overload Voltage	Operating Temp. Range
				XR73H F: ±1% E24, E96	XR73B J: ±5% E24			
1H	0.063W	70°C	±200	10Ω~1MΩ	10Ω~10MΩ	50V	100V	-55°C to +155°C
			±400	1.0Ω~9.1Ω**	1.0Ω~9.1Ω			
1E	0.063W	70°C	±100	10Ω~1MΩ	—	50V	100V	-55°C to +155°C
			±200	1.0Ω~9.76Ω 1.02MΩ~10MΩ	1.0Ω~10MΩ			

Rated voltage =  $\sqrt{\text{Power rating} \times \text{resistance value}}$  or max. working voltage, whichever is lower

\* The ratings will be for the surface mounted condition      \*\* The nominal resistance value for XR73H1H ( $1\Omega \leq R \leq 9.1\Omega$ ) is E24

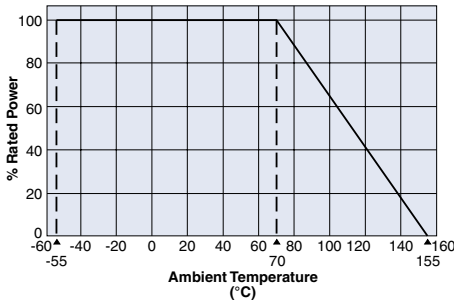
### XR73Z

Part Designation	Resistance	Current Rating*	Rated Ambient Temp.	Maximum Overload Current	Operating Temp. Range
1H	50mΩ max.	1A	70°C	2A	-55°C to +155°C
1E	50mΩ max.	1A	70°C	2A	-55°C to +155°C

\* The ratings will be for the surface mounted condition

## 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 derating curve.

## Performance Characteristics

Parameter	XR73H, XR73B Requirement $\Delta R \pm(\%+0.05\%)$		XR73Z Requirement		Test Method
	Limit	Typical	Limit	Typical	
Resistance	Within specified tolerance	—	50mΩ max. after the test	15mΩ max. after the test	25°C
T.C.R.	Within specified T.C.R.	—	—	—	+25°C/-55°C and +25°C/+125°C
Overload (Short time)	±2%	±0.5%	50mΩ max. after the test	1E: $R \leq 20m\Omega$ 1H: $R \leq 40m\Omega$	Rated Voltage x 2.5 for 5 seconds 1H: Rated voltage (DC) x 2 for 5 seconds
Rapid Change of Temperature	±1%	±0.5%	100mΩ max. after the test	1E: $R \leq 20m\Omega$ 1H: $R \leq 40m\Omega$	-55°C (30 minutes), +125°C (30 minutes), 100 cycles
Moisture Resistance	±3%	±1.5%	100mΩ max. after the test	1E: $R \leq 20m\Omega$ 1H: $R \leq 40m\Omega$	40°C ± 2°C, 90%~95%RH, 1000 hours; 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±3%	±1%	100mΩ max. after the test	1E: $R \leq 20m\Omega$ 1H: $R \leq 40m\Omega$	70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±1%	±0.5%	100mΩ max. after the test	1E: $R \leq 20m\Omega$ 1H: $R \leq 40m\Omega$	+155°C, 1000 hours

Additional environmental applications can also be found at [www.koaspeer.com](http://www.koaspeer.com)

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

1/11/17