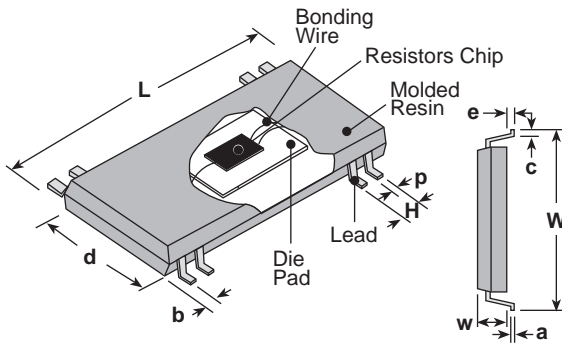


## features

- High precision high voltage divider
- Maximum resistance value 51MΩ, maximum working voltage 1000V, maximum resistance ratio 1000:1
- Relative precision of pair resistors are guaranteed
- Higher integration saves board space and overall assembly costs
- Excellent reliability with standard molded IC package
- Suitable for reflow soldering
- Products meet EU RoHS requirements
- AEC-Q200 tested

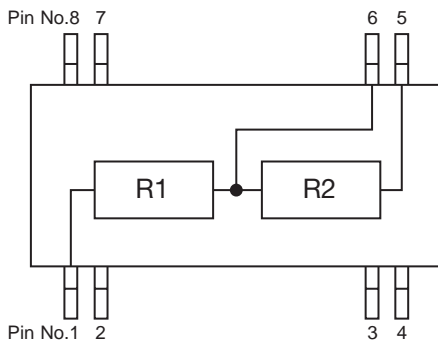
## dimensions and construction



Type	Dimensions inches (mm)				
	L ±0.2	W ±0.2	w ±0.2	H ±0.2	p ±0.1
HVD	.341 (8.66)	.236 (5.99)	.063 (1.60)	.059 (1.50)	.010 (0.25)

Type	Dimensions inches (mm)				
	a ±0.1	b ±0.1	c ±0.2	d ±0.1	e ±0.1
HVD	.008 (0.20)	.011 (0.29)	.026 (0.66)	.150 (3.81)	.007 (0.18)

## circuit schematic



## ordering information

<b>HVD</b>	<b>P08</b>	<b>T</b>	<b>TE</b>	<b>9XXX</b>
<b>Circuit Code</b>	<b>Package Symbol</b>	<b>Termination Surface Material</b>	<b>Packaging</b>	<b>Custom Code</b>
HVD: High Voltage Divider	Package type symbol + Number of pins	T: Sn	TE: Embossed plastic	

Contact KOA when you have a control request for environmental hazardous material other than the substance specified by EU RoHS.

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

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

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### applications and ratings

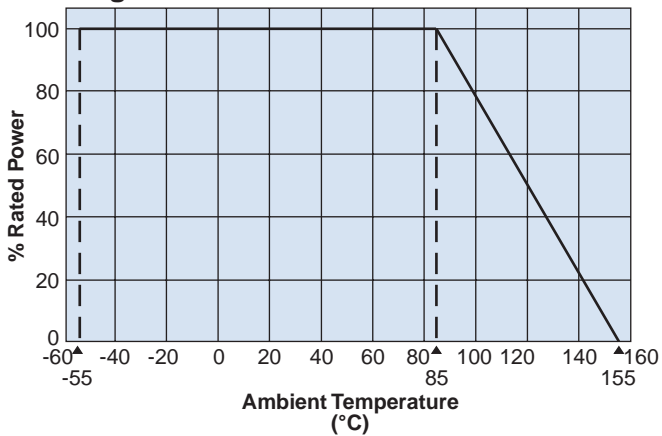
Part Designation	Max. Working Voltage	Power Rating /Resistor Element	Resistance Range Resistance Ratio 10:1~1,000:1 (R1+R2)/R2	Absolute Resistance Tolerance	Relative Resistance Tolerance	T.C.R. (X10 <sup>-6</sup> /K)	Relative T.C.R. Tracking	Rated Ambient Temperature	Operating Temperature Range
R1	1000V	250mW	0.5MΩ ~ 51MΩ	±0.1%, ±0.25%, ±0.5%, ±1%	0.1% 0.25%	±25	10	+85°C	-55°C to +155°C
R2	15V	50mW	4.5kΩ ~ 1MΩ	—	0.5%	±50	25		

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

Guaranteed value differs depending on resistance value

### environmental applications

#### Derating Curve



For resistors operated at an ambient temperature of 85°C or above, a power rating shall be derated in accordance with the derating curve.

### Performance Characteristics

Parameter	Requirement $\Delta R \pm(\%+0.05\Omega)$		Test Method
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C/-55°C, +25°C/+155°C
Resistance to Soldering Heat	±0.1%	±0.02%	260°C ± 5°C, 10 seconds ± 1 second
Rapid Change of Temperature	±0.1%	±0.01%	-55°C (30 minutes), +155°C (30 minutes), 1000 cycles
Moisture Resistance	±0.1%	±0.02%	85°C ± 2°C, 85% ± 5% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 85°C	±0.1%	±0.01%	85°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±0.1%	±0.03%	+155°C, 1000 hours