# 25ppm, 0.1%, High Reliability Thick Film Chip Resistors



## RS73 – Series

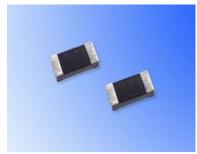
# KOA's new RS73-series is designed for high precision and high reliability applications by using thick film technology.

With a T.C.R. down to 25ppm and a tolerance as low as 0.1%, the new RS73-series from KOA is ideal for precision designs such as high-accuracy sensing or voltage detection circuits in automotive, industrial and measuring applications, where ESD sensitivity is an issue.

The new RS73-series also offers excellent long term stability.

Currently, the RS73 series is only available in 0603 size.

However, 0402, 0805 and 1206 are under development and will be released soon.



#### Product Features

- ±0.1%, ±0.25%, ±0.5% tolerances available
- ±25ppm/K, ±50ppm/K
- ±0.2%~ Long term stability (see performance data)
- ESD stability of thick film resistors
- Ideal for applications where thin film is not suitable
- Anti-Sulfuration type also available (RS73-RT)
- AEC-Q200 qualified

### Application Examples

- High precision circuits for automotive and industrial
- Motor circuits
- AC adapters
- A/D signal conversion
- Switching boards
- Industrial equipment & measurement

# Ratings

Туре	Size (inch)	Power Rating	Rated Ambient Temp.	Rated Terminal Part Temp.	T.C.R. (ppm/K)	Resistance Range (E24 & E96)*2			Max.	Max.
						B: ±0.1%	C: ±0.25%	D: ±0.5%	Working Voltage	Overload Voltage
RS73F1J	0603	0.125 W	+70 °C	+125 °C	±25*1	100 Ω ~ 1 ΜΩ		75 V	150V	
RS73G1J	0003	0.125 W			±50					

<sup>\*1</sup> Cold T.C.R. (-55°C/+25°C) is -50/~ +25 ppm/K

Operating Temperature Range: -55 °C ... +155 °C

#### Performance

		Limit⊿R		Typical⊿R	
Parameter	Test method	100Ω≤R≤ 200kΩ	200kΩ <r≤< th=""><th>100Ω≤R≤ 200kΩ</th><th>200kΩ<r≤< th=""></r≤<></th></r≤<>	100Ω≤R≤ 200kΩ	200kΩ <r≤< th=""></r≤<>
		200K12	1ΜΩ	200K12	1ΜΩ
Short Time Overload	Rated voltage x 2.5 for 5sec	±0.2 %		±0.03 %	
Chort Time Overload	(Not exceeding max. overload voltage)				
Resistance to soldering heat	+260°C ±5°C, 10sec ±1sec			±0.1 %	
Rapid change of temperature	-55°C(30min.) / +125°C(30min.), 1000cycles			±0.05 %	
High Temperature exposure	+155°C ±3°C, 1000hrs	±0.2 %	±0.4 %	±0.1 %	±0.2 %
Moisture resistance	+40°C ±2°, 90~95%RH, 1000hrs 1.5h ON / 0.5h OFF cycle	±0.2 %	±0.4 %	±0.04 %	±0.08 %
Rated load	+70°C ±2°, 1000hrs, 1.5h ON/0.5h OFF cycle	±0.2 %		±0.05 %	

For more information, please contact:

KOA Europe GmbH, Kaddenbusch 6, D-25578 Dägeling-Itzehoe, Germany

Phone: +49 (0)4821 89890, E-Mail: koa-europe@koaeurope.de, Internet: www.koaeurope.de

<sup>\*2</sup> Please contact KOA in case E192 values are needed