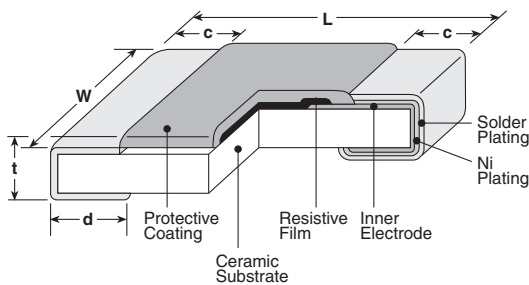


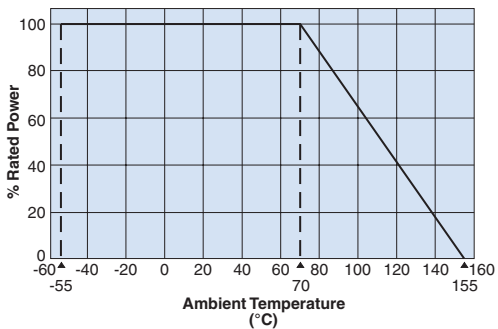
features

- RuO₂ thick film resistor element
- Meets or exceeds EIA 575, EIAJ RC 2690A, EIA PDP-100, MIL-R-55342F
- Superior to RK73B/RK73H series in surge dielectric withstanding voltage
- Marking: White three-digit on wine red protective coat, SG73P: Black three-digit, SG73S: White three-digit on green protective coating
- Products with lead-free terminations meet EU RoHS requirements. Pb located in glass material, electrode and resistor element is exempt per Annex 1, exemption 5 of EU directive 2005/95/EC

dimensions and construction



Derating Curve



Type (Inch Size Code)	Dimensions inches (mm)					
	L	W	c	d	t	
SG731J,SG73P1J SG73S1J (0603)	.063±.008 (1.6±0.2)	.031±.004 (0.8±0.1)	.012±.004 (0.3±0.1)	.012±.004 (0.3±0.1)	.018±.004 (0.45±0.1)	
SG732A (0805)	.079±.008 (2.0±0.2)	.049±.004 (1.25±0.1)	.016±.008 (0.4±0.2)	.012 ^{+0.008} _{-.004} (0.3 ^{+0.2} _{-.1})	.02±.004 (0.5±0.1)	
SG73P2A, SG73S2A (0805)			.012 ^{+0.008} _{-.004} (0.3 ^{+0.2} _{-.1})			
SG732B (1206)	.126±.008 (3.2±0.2)	.063±.008 (1.6±0.2)	.02±.012 (0.5±0.3)	.016 ^{+0.008} _{-.004} (0.4 ^{+0.2} _{-.1})	.024±.004 (0.6±0.1)	
SG73P2B, SG73S2B (1206)			.016 ^{+0.008} _{-.004} (0.4 ^{+0.2} _{-.1})			
SG732E (1210)			.102±.008 (2.6±0.2)			
SG73P2E, SG73S2E (1210)	.197±.008 (5.0±0.2)	.098±.008 (2.5±0.2)	.02±.012 (0.5±0.3)	.016 ^{+0.008} _{-.004} (0.4 ^{+0.2} _{-.1})	.026±.006 (0.65±0.15)	
SG732H (2010)						
SG73W2H (2010)	.248±.008 (6.3±0.2)	.122±.008 (3.1±0.2)	.02±.012 (0.5±0.3)	.016 ^{+0.008} _{-.004} (0.4 ^{+0.2} _{-.1})	.026±.006 (0.65±0.15)	
SG733A (2512)						
SG73W3A (2512)						

ordering information

New Part #	SG73	2B	T	TD	102	K
Type	SG73 SG73P SG73S	Size	Termination Material	Packaging	Nominal Resistance	Tolerance
		1J 2A 2B 2E 2H 3A W2H W3A	T: Sn (Other termination styles may be available, please contact factory for options)	TP: 0603, 0805: 7" 2mm pitch punch paper TD: 0603, 0805, 1206, 1210: 7" 4mm pitch punched paper TDD: 0603, 0805, 1206, 1210: 10" paper tape TE: 0805, 1206, 1210, 2010 & 2512: 7" punched plastic TED: 0805, 1206, 1210, 2010 & 2512: 10" punched plastic For further information on packaging, please refer to Appendix A	±0.5%, ±1%: 3 significant figures + 1 multiplier "R" indicates decimal on value <100Ω ±2%, ±5%, ±10%, ±20%: 2 significant figures + 1 multiplier "R" indicates decimal on value <10Ω	D: ±0.5% F: ±1% G: ±2% J: ±5% K: ±10% M: ±20%

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

11/06/09

applications and ratings

Part Designation	Power Rating @ 70°C	T.C.R. (ppm/°C) Max.	Resistance Range				Absolute Maximum Working Voltage	Absolute Maximum Overload Voltage	Operating Temp. Range
			(E-24) (D±0.5%)	(E-24) (F±1%)	(E-24) (G±2%,J±5%)	(E-12) (K±10%,M±20%)			
SG731J (0603)	1/16W (.1W)	±200 ±400	—	—	—	10Ω - 1MΩ 1Ω - 8.2Ω	50V	100V	-55°C to +155°C
SG732A (0805)	1/8W (.125W)	±200 ±400	—	—	—	10Ω - 1MΩ 1Ω - 8.2Ω	150V	200V	
SG732B (1206)	1/4W (.25W)	±200 ±400	—	—	—	10Ω - 1MΩ 1Ω - 8.2Ω	200V	400V	
SG732E (1210)	1/3W (.33W)	±200 ±400	—	—	—	10Ω - 1MΩ 1Ω - 8.2Ω			
SG732H/W2H (2010)	3/4W (.75W)	±200 ±400	—	—	—	10Ω - 1MΩ 1Ω - 8.2Ω			
SG733A/W3A (2512)	1W	±200 ±400	—	—	—	10Ω - 1MΩ 1Ω - 8.2Ω			
SG73P1J, SG73S1J (0603)	1/5W (.2W)	±100**	10Ω - 1MΩ	1Ω - 1MΩ	1Ω - 10MΩ	—	50V	100V	
SG73S2A, SG73P2A (0805)	1/4W (.25W)	±200	10Ω - 1MΩ	1Ω - 1MΩ	1Ω - 10MΩ	—	150V	200V	
SG73S2B, SG73P2B (1206)	1/3W (.33W)	±200	10Ω - 1MΩ	1Ω - 1MΩ	1Ω - 10MΩ	—	200V	400V	
SG73S2E, SG73P2E (1210)	1/2W (.5W)	±200	10Ω - 1MΩ	1Ω - 1MΩ	1Ω - 10MΩ	—			

* Parenthesis indicate EIA package size codes.

** Cold T.C.R.: +150 x 10⁻⁶/K

environmental applications

Performance Characteristics

Parameter	Requirement Δ R		Test Method
	Limit	Typical	
Resistance	Within specified tolerance	—	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%	Rated Voltage x 2.5 for 5 seconds
Resistance to Solder Heat	±1%	±0.75%	260°C ± 5°C, 10 seconds ± 1 second
Rapid Change of Temperature	±0.5%	±0.3%	-55°C (30 minutes), +125°C (30 minutes), 100 cycles
Moisture Resistance	±3%	±0.75%	40°C ± 2°C, 90%~95%RH, 1000 hours; 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 85°C	±3%	±0.75%	70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±1%	±0.3%	+155°C, 1000 hours

Additional environmental applications can also be found at 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.

11/05/09