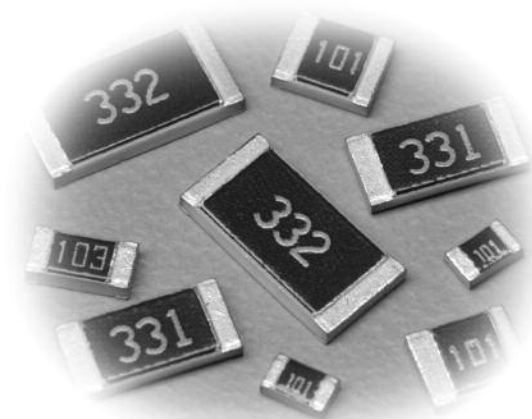
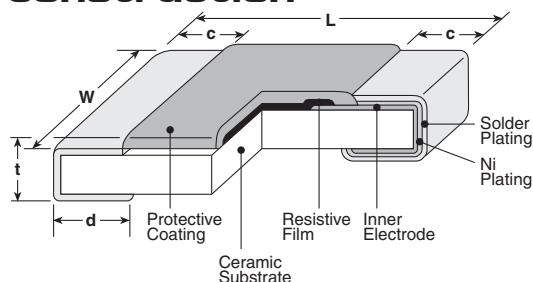




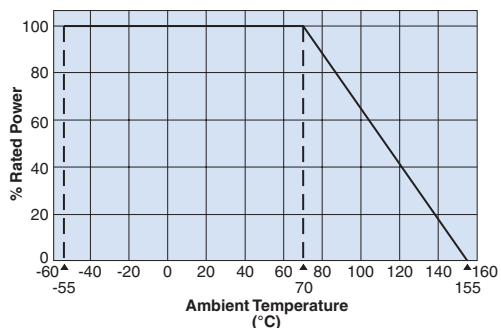
features

- 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
SG73P/S 1E, 1J: no marking
SG73P/S 1E: Black coating
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.

dimensions and construction



Derating Curve



ordering information

New Part #

SG73	2B	T	TD	102	K
Type	Size	Termination Material	Packaging	Nominal Resistance	Tolerance
SG73 SG73P SG73S	NEW1E 1J 2A 2B 2E W2H W3A 2H 3A	T: Sn (Other termination styles may be available, please contact factory for options)	TP: 0402, 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" embossed plastic TED: 0805, 1206, 1210, 2010 & 2512: 10" embossed 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%

Type (Inch Size Code)	Dimensions inches (mm)				
	L	W	c	d	t
NEW SG73P1E, SG73S1E (0402)	.039 ^{+.004} _{-.002} (1.0 ^{+.01} _{-.05})	.02±.002 (0.5±0.05)	.006±.004 (0.15±0.1)	.010 ^{+.002} _{-.004} (0.25 ^{+.05} _{-.1})	.014±.002 (0.35±0.05)
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 ^{+.008} _{-.004} (0.3 ^{+.02} _{-.1})	.02±.004 (0.5±0.1)
SG73P2A, SG73S2A (0805)			.012 ^{+.008} _{-.004} (0.3 ^{+.02} _{-.1})		
SG732B (1206)		.063±.008 (1.6±0.2)	.02±.012 (0.5±0.3)	.016 ^{+.008} _{-.004} (0.4 ^{+.02} _{-.1})	.024±.004 (0.6±0.1)
SG73P2B, SG73S2B (1206)	.126±.008 (3.2±0.2)		.016 ^{+.008} _{-.004} (0.4 ^{+.02} _{-.1})		
SG732E (1210)		.102±.008 (2.6±0.2)	.02±.012 (0.5±0.3)		
SG73P2E, SG73S2E (1210)			.016 ^{+.008} _{-.004} (0.4 ^{+.02} _{-.1})		
SG732H (2010)	.197±.008 (5.0±0.2)	.098±.008 (2.5±0.2)	.02±.012 (0.5±0.3)	.026±.006 (0.65±0.15)	
SG73W2H (2010)				.016 ^{+.008} _{-.004} (0.4 ^{+.02} _{-.1})	
SG733A (2512)	.248±.008 (6.3±0.2)	.122±.008 (3.1±0.2)		.026±.006 (0.65±0.15)	
SG73W3A (2512)					

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

4/27/11

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%)				
NEW	SG731J (0603)	1/10W (.1W)	±200	—	—	—	10Ω - 1MΩ	50V	100V	-55°C to +155°C
		±400	1Ω - 8.2Ω							
	SG732A (0805)	1/8W (.125W)	±200	—	—	—	10Ω - 1MΩ	150V	200V	
		±400	1Ω - 8.2Ω							
	SG732B (1206)	1/4W (.25W)	±200	—	—	—	10Ω - 1MΩ	200V	400V	
		±400	1Ω - 8.2Ω							
	SG732E (1210)	1/3W (.33W)	±200	—	—	—	10Ω - 1MΩ			
		±400	1Ω - 8.2Ω							
	SG732H/W2H (2010)	3/4W (.75W)	±200	—	—	—	10Ω - 1MΩ			
		±400	1Ω - 8.2Ω							
	SG733A/W3A (2512)	1W	±200	—	—	—	10Ω - 1MΩ			
			±400				1Ω - 8.2Ω			
SG73P1E, SG73S1E (0402)	1/8W (.125W)	±200	10Ω - 1MΩ	1Ω - 1MΩ	1Ω - 10MΩ	—	50V	100V		
SG73P1J, SG73S1J (0603)	1/5W (.2W)	±100**								
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	—				

* Parentheses indicate EIA package size codes.

** Cold T.C.R.: +150 x 10⁻⁶/K

environmental applications

Performance Characteristics

Parameter	Requirement Δ R ±(%+0.05Ω)		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 70°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.

4/27/11