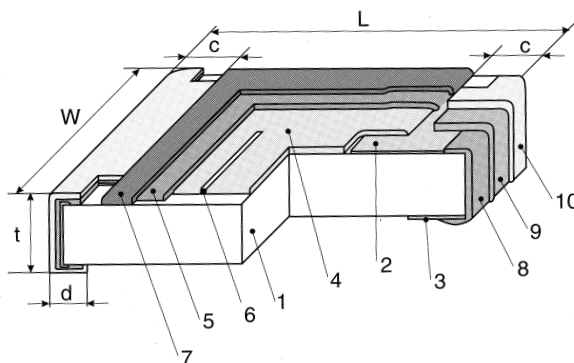


FLAT CHIP ENHANCED THICK FILM RK73G



STRUCTURE

- 1 Ceramic substrate
- 2 Top termination (Ag Pd)
- 3 Bottom termination (Ag)
- 4 Resistive layer
- 5 Glass layer
- 6 Trimming cut
- 7 Protective layer
- 8 End termination
- 9 Diffusion barrier (Ni)
- 10 Solder plating

IDENTIFICATION

TYPE	COATING COLOR	MARKING
RK73G 1H, 1E	Black	None
RK73G 1J	Dark Blue	White, 3 digits (E24) None (E96)
RK73G 2A, 2B		White, 4 digits

Products with Pb-free terminations meet RoHS requirements

TYPE DESIGNATION (HOW TO ORDER)

RK73G	1J	T	TD	2212	F
PRODUCT CODE	STYLE	TERMINATION	TAPING*	NOMINAL RESISTANCE	TOLERANCE
	1H: 0.05 W 1E: 0.063 W 1J: 0.1 W 2A: 0.125 W 2B: 0.25 W	SURFACE MATERIAL T: Sn L: Sn/Pb	TC, TCM: 2mm pitch press paper TP: 2mm pitch punch paper TD: 4mm pitch punch paper TE: 4mm pitch embossed plastic BK: Bulk *Please see "PACKAGING"	4 digits	D: $\pm 0.5\%$ F: $\pm 1\%$

FEATURES

- Enhanced RuO₂ thick film resistor element
- Anti-leaching nickel barrier terminations
- High precision thickfilm with T.C.R. ± 50 ppm/K and tolerance $\pm 0.5\%$
- Able to be used as replacement of several metal film chip resistors
- Meets or exceeds IEC 60115-8, JIS C 5201-8, EIAJ RC-2134A
- Operating temperature range: $-55^{\circ}\text{C} \dots +155^{\circ}\text{C}$ (1E, 1J, 2A, 2B)
- Operating temperature range: $-55^{\circ}\text{C} \dots +125^{\circ}\text{C}$ (1H)
- Suitable for reflow and wave soldering
- Lab Kit available

DIMENSIONS (mm)

SIZE	TYPE	L	W	c	d	t
NEW 0201	RK73G 1H	0.6 ± 0.03	0.3 ± 0.03	0.1 ± 0.05	0.15 ± 0.05	0.23 ± 0.03
0402	RK73G 1E	1.0 ± 0.1	0.5 ± 0.05	0.2 ± 0.1	0.25 ± 0.05	0.35 ± 0.05
0603	RK73G 1J	1.6 ± 0.2	0.8 ± 0.1	0.3 ± 0.1	0.3 ± 0.1	0.45 ± 0.1
0805	RK73G 2A	2.0 ± 0.2	1.25 ± 0.1	0.4 ± 0.2	0.3 ± 0.1	0.5 ± 0.1
1206	RK73G 2B	3.2 ± 0.2	1.6 ± 0.2	0.5 ± 0.3	0.4 ± 0.2	0.6 ± 0.1

RATING

TYPE	POWER* RATING	MAX. WORKING VOLTAGE 1)	MAX. OVERLOAD VOLTAGE 4)	SURFACE TEMPERATURE 2)	TYP. ΔR/R AFTER 1000h 3)	INSULATION RESISTANCE	FAILURE RATE
NEW RK73G 1H	0.05 W	25 V	50 V	+125° C	±(1% • R +0.05 Ω)	> 10 GΩ	< 0.01 FIT
RK73G 1E	0.063 W	50 V	100 V				
RK73G 1J	0.1 W	75 V	150 V				
RK73G 2A	0.125 W	150 V	200 V		±(0.6% • R +0.05 Ω)		
RK73G 2B	0.25 W	200 V	400 V				

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

* For resistors operated at an ambient temperature of $+70^{\circ}\text{C}$ or above, the power rating shall be derated in accordance with below "DERATING CURVE".

- The maximum value of D.C. voltage or A.C. voltage (effective value) capable of being applied continuously to a resistor.
- The surface temperature is restricted by the maximum permissible solderpoint temperature.
- Typical $\Delta R/R$ pertains to rated power at 70°C (Endurance).
- The maximum value of D.C. or A.C. voltage (effective value) capable of being applied to a resistor for a short time.

TEMPERATURE COEFFICIENTS AND RESISTANCE RANGES

SIZE	TYPE	T.C.R. (ppm/K)	RESISTANCE RANGE (E24 · E96)	
			D ($\pm 0.5\%$)	F ($\pm 1\%$)
NEW 0201	RK73G 1H**	$\pm 50^{**}$	$100 \Omega \dots 1 \text{ M}\Omega^{*}$	$100 \Omega \dots 1 \text{ M}\Omega^{*}$
0402	RK73G 1E		$10 \Omega \dots 976 \text{ k}\Omega$	$10 \Omega \dots 1 \text{ M}\Omega$
0603	RK73G 1J		$10 \Omega \dots 1 \text{ M}\Omega$	$10 \Omega \dots 1.8 \text{ M}\Omega$
0805	RK73G 2A			
1206	RK73G 2B			

* The nominal resistance values for RK73G 1H are only available from E24 series.

** For size 1H the TCR ± 50 ppm/k is guaranteed in the temperature range $+25^{\circ}\text{C} \dots +125^{\circ}\text{C}$.

DERATING CURVE

