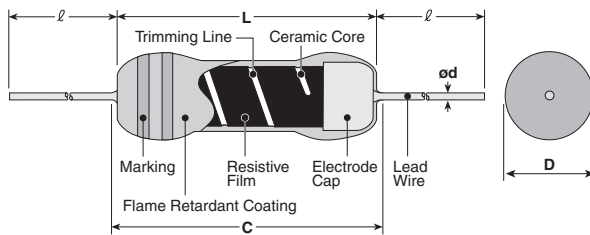


**features**

- Flame retardant coating (Equivalent to UL94 V-0)
- Automatic insertion is applicable
- Various types of formings are available
- Products meet EU RoHS requirements

leaded resistors

**dimensions and construction**



Type	Dimensions inches (mm)				ℓ***	
	L	C (max.)	D	d (nom.)	Standard	Long
SNF2C	.126±.008 (3.2±0.2)	.134 (3.4)	.067 <sup>+0.008</sup> / <sub>-0.004</sub> (1.7 <sup>+0.2</sup> / <sub>-0.1</sub> )	.018 (0.45)	.551 Min.* (14.0 Min.)	.787 Min.** (20.0 Min.)
SNF2E	.240±.02 (6.1±0.5)	.280 (7.1)	.092±.012 (2.3±0.3)	.024 (0.6)		
SNF2H	.354±.039 (9.0±1.0)	.433 (11.0)	.138±.02 (3.5±0.5)	.028 (0.7)	.787 Min. (20.0 Min.)	—

\* Forming code S is applied for bulk type.

\*\* Long type is custom-made

\*\*\* Lead length changes depending on taping and forming type

**ordering information**

<b>SNF</b>	<b>2E</b>	<b>C</b>	<b>T52</b>	<b>A</b>	<b>100</b>	<b>F</b>
Type	Power Rating	Termination Surface Material	Taping & Forming	Packaging	Nominal Resistance	Resistance Tolerance
	2C: 0.25W 2E: 0.25W 2H: 0.5W	C: SnCu	S: Standard Nil: Long SNF2CC: S, Nil, T26, T52, M5F SNF2EC: S, Nil, T26, T52, M10F, M12.5R SNF2HC: Nil, T52, M12.5K, M15K	A: Ammo R: Reel Nil: Box	3 digits	J: ±5%

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

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

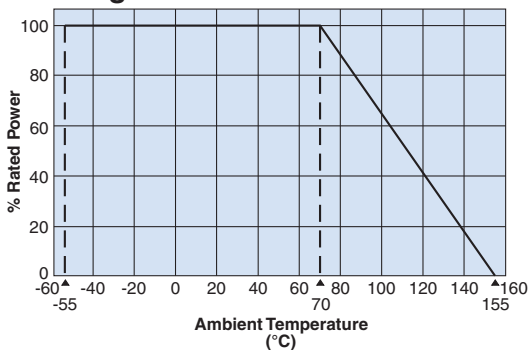
## applications and ratings

Part Designation	Power Rating	Resistance Range ( $\Omega$ ) J: $\pm 5\%$ E24	T.C.R. ( $\times 10^{-6}/K$ )	Maximum Working Voltage	Maximum Overload Voltage	Dielectric Withstanding Voltage	Rated Ambient Temp.	Operating Temp. Range
SNF2CC	0.25W	0.47 - 9.1	+350 - -450	$E = \sqrt{P \times R}$ (V)	Ex2.5 (V)	300V	+70°C	-55°C to +155°C
SNF2EC		0.47 - 100				500V		
SNF2HC	0.50W					700V		

Rated voltage =  $\sqrt{\text{Power Rating} \times \text{Resistance Value}}$

## environmental applications

### Derating Curve



For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with the above 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/+125°C
Overload (Short time)	$\pm 1\%$	$\pm 0.5\%$	Rated voltage x 2.5 or max. overload voltage, whichever is lower, for 5 seconds
Resistance to Solder Heat	$\pm 1\%$	$\pm 0.5\%$	260°C $\pm 5^\circ\text{C}$ , 10 seconds $\pm 1$ second, 350°C $\pm 10^\circ\text{C}$ , 3.5 seconds $\pm 0.5$ second
Terminal Strength	No lead-coming off and loose terminals	—	Twist 360°C, 5 times
Rapid Change of Temperature	$\pm 1\%$	$\pm 0.5\%$	-55°C (30 minutes)/ +125°C (30 minutes), 5 cycles
Moisture Resistance	$\pm 5\%$	$\pm 2.5\%$	40°C $\pm 2^\circ\text{C}$ , 90 - 95% RH, 1000 hours, 1.5 hr ON/0.5 hr OFF cycle
Endurance at 70°C	$\pm 3\%$	$\pm 1.5\%$	70°C $\pm 2^\circ\text{C}$ , 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Resistance to Solvent	No abnormality in appearance. Marking shall be easily legible.	—	Ultrasonic washing with Isopropyl alcohol for 2 minutes. Power: 0.3W/cm <sup>2</sup> , f: 28kHz, Temp: 35°C $\pm 5^\circ\text{C}$
Flame Retardant	No evidence of flaming or self-flaming	—	Flame test: The test flame shall be applied and removed for each 15 seconds respectively to repeat the cycle 5 times. Overload flame retardant: AC Voltage corresponding to 2, 4, 8, 16 and 32 times the power rating shall be applied for each 1 minute until disconnection occurs. However the applied voltage shall not exceed 4 times the maximum operating voltage.