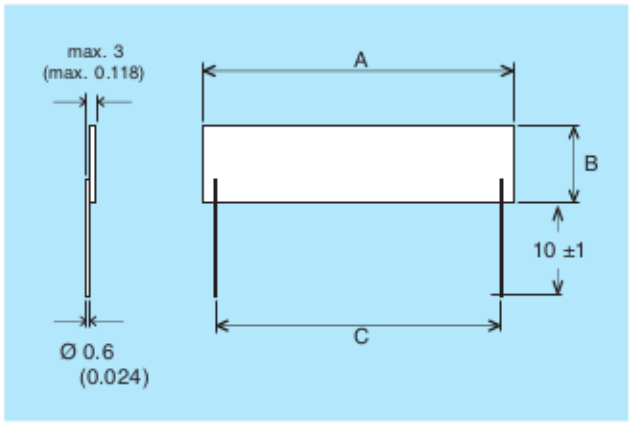
High-Voltage Resistors

High-Voltage Flat Style Resistors Series FPX and FLX

TC of 100 ppm/°C combined with precision tolerances (0.5%–10%) and wide ohmic range

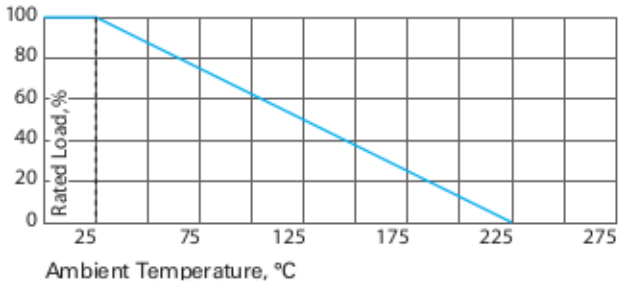
Low-cost power resistors that provide high-density packaging in large volume applications.

- Series FPX and FLX printed on surface with silicone conformal black coating for high-temperature operation (225°C)
- High voltage withstanding up to 22,000 V
- Five different sizes
- Thickness max. 3 mm (0.118 inch) for high-density packaging
- Non-Inductive Design



Specifications

- Resistance range: FPX: 200 Ω to 2 GΩ, FLX: 10Ω to 1 GW
- Resistance tolerance: FPX: ±1% to 10%, FLX: ±0.5% to 10%
- Temperature coefficient: ±100 ppm/°C , measured from +25°C to 85°C
- Voltage coefficient (typically): Resistance range – ppm/V
  200 R – 1 M: 0.1–1.0, 1 M – 100 M: 0.2–3.0, 100 M – 2,000 M: 0.5–10.0
- Max. operating voltage: "S"; upon request up to 35% higher than listed



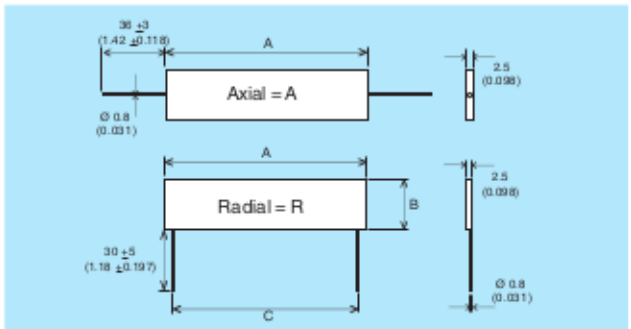
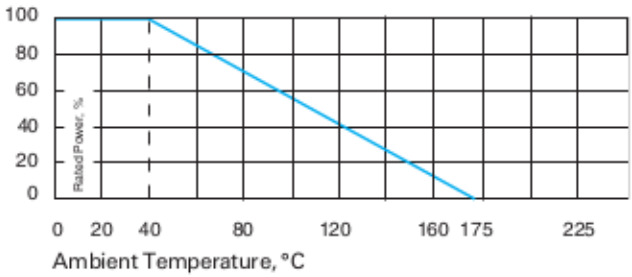
	Model no.	Wattage	Max. continuous oper. Volt	Dimensions in millimeters Dimensions in inches		
				A (max.) ±0.50 ±0.02	B (max.) ±0.50 ±0.02	C ±0.50 ±0.02
Series FPX with Surface Silicone Print	FPX1/2	1.50	3,000*	12.90 *0.51*	3.40 *0.13*	10.20 *0.40*
	FPX8/5	2.50	6,000*	25.60 *1.01*	5.30 *0.21*	22.90 *0.90*
	FPX3	4.00	9,000*	38.30 *1.51*	6.60 *0.26*	35.50 *1.40*
	FPX4	5.00	11,500*	51.00 *2.01*	6.60 *0.26*	48.20 *1.90*
	FPX2/2	7.50	16,500*	51.00 *2.01*	12.90 *0.51*	48.20 *1.90*
Series FLX with Conformal Silicone Protection	FLX1/2	1.50	300	12.90 *0.51*	3.40 *0.13*	10.20 *0.40*
	FLX8/5	2.50	500	25.60 *1.01*	5.30 *0.21*	22.90 *0.90*
	FLX3	4.00	800	38.30 *1.51*	6.60 *0.26*	35.50 *1.40*
	FLX4	5.00	1,000	51.00 *2.01*	6.60 *0.26*	48.20 *1.90*
	FLX2/2	7.50	1,000	51.00 *2.01*	12.90 *0.51*	48.20 *1.90*

* when used in clean air

High-Voltage Flat Style Resistors Series MTX 967

Type	P_{Watt}	U_{RVDC}	A	B	C
967.3.25 967.3.38	1 1.5	8 10	25.4 38	3.8 3.8	22.9 35.7
967.5.13* 967.5.51	1 2	5 20	12.7 50.8	5 5	10.2 48.3
967.10.25 967.10.51	2 3	10 30	25.4 50.8	10 10	22.9 48.3
967.15.38 967.15.51	3 4.5	15 30	38 50.8	15 15	35.7 48.3
967.15.76 967.25.99	5.5 10	35 35	76.2 101.6	15 24	73.4 98.6

* Pins: L = 9 + 1mm ▱ = 0.6 x 0.35mm



Operating temperature:	–55 to +175°C
Resistance range:	10 Ω to 30 GΩ (depending on type)
Temperature coefficient:	±10 to ±200 ppm/°C
Tolerance:	±10% to ±0.1%
Insulation resistance:	>10,000 MΩ (500 V, 25°C, 75% relative humidity)
Dielectric strength:	>1000 V (25°C, 75% relative humidity)
Thermal shock:	ΔR/R 0.2% max
Overload:	ΔR/R 0.25% max 1.5 x Pnom, 5 sec (do not exceed 1.5 x V max.)
Moisture resistance:	ΔR/R 0.25% max.
Load life:	ΔR/R 0.25% max.
Encapsulation:	silicone conformal (other coatings with different dielectric strengths upon request!)
Lead material:	tinned copper