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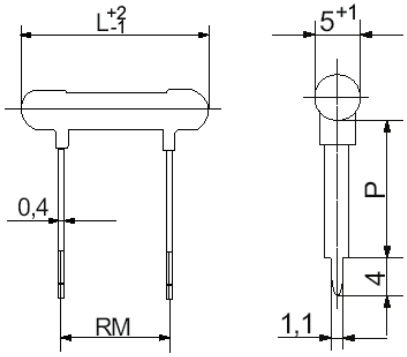
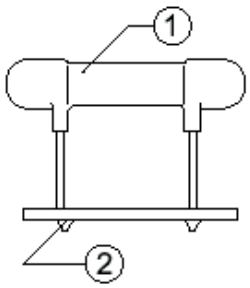
CEMENTED WIREWOUND RESISTORS MODEL SFR

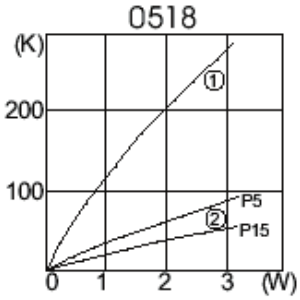
TECHNICAL DESIGN

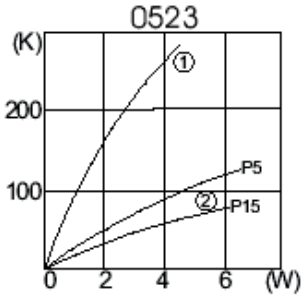


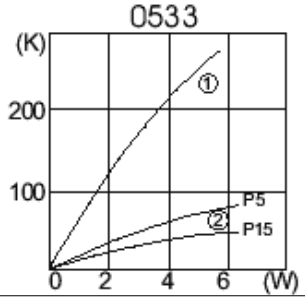
GENERAL FEATURES

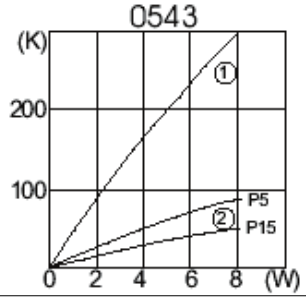
The curves shown the temperature increase as a function of the load, the former beeing measured at points 1 and 2 for PCB-mounted resistors.

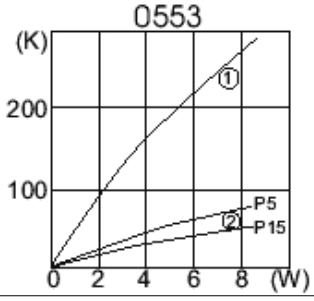












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GENERAL FEATURES

The resistors of the SFR series are low-power resistor, the main characteristics for this resistors are the compactness and the small dimensions that permit to use this products on electronic printed boards. The terminal may be tinned and permit a fast insert on electric board.

ELECTRICAL CHARACTERISTICS

Nominal resistances	series E 12 (10%), Series E 24 (5%), DIN 41426
Climatic category (IEC 68)	55/255/10
Solderability (260 °C x10s.)	≤ 1% + 0,1 Ω
Temperature cycling (-55°C / +200°C)	≤ 2% + 0,1 Ω
Damp heat (21 days 40 °C / 95% r.h.)	≤ 3% + 0,1 Ω
Resistance rangeTs = 250°C	1,000 h : -1.0 fino a +3.0%
	10,000 h -1.: 5 fino a +5.0%
	100,000 h -2.: 0 fi no +8.a 0%

The mentioned values apply for 99,7% of all resistors. For low.value-resistors, the mentioned variations may be exceeded by 0,1 Ω.
Reliability : At 70 °C, ambient temperature,25% r.h. and 250°C surface temperature standard rating for complete failure : <= 100 x 10-9/h.

Note :
Ta = Ambient Temperature
Ts = Surface Temperature

GENERAL FEATURES

Style		SFR 0518 P...	SFR 0523 P...	SFR 0533 P...	SFR 0543 P...	SFR 0553 P...
Dimensions	**L =**	19,0 mm	24,0 mm	34,0 mm	44,0 mm	54,0 mm
	P =	5mm or 15mm			-	-
	RM (±0,5) =	10,2 mm	15,2 mm	25,4 mm	35,5 mm	45,7 mm
Carrier		Fiber glass core				
Resistance range	**CuNi 10**	R10 - R20	R13 - R30	R22 - R51	R30 - R68	R39 - R91
	CuNi 44/NiCr	R22 - 6K2	R33 - 9K1	R56 - 15K	R75 - 22K	1R0 - 27K
Resistance tolerances		K (± 10%) CuNi 10 / CuNi 44 / NiCr J (± 5%) CuNi 44 / NiCr				
Power rating P_N	**T_A = 70°C**	2,5 W	4 W	5 W	6,5 W	8 W
Dissipation at Ta=25°C	**Ts= 200°C**	1,7 W	2,5 W	3,1 W	4,0 W	4,5 W
	Ts= 250°C	2,3 W	3,4 W	4,2 W	5,3 W	6,2 W
Dissipation at Ta=70°C	**Ts= 200°C**	1,2 W	1,7 W	2,4 W	2,8 W	3,2 W
	Ts= 330°C	2,5 W	4,0 W	5,0 W	6,5 W	8,0 W
Limiting voltage		U = RADQ (P_N x R)				
Temperature coefficient		CuNi 10: +350...+450 x 10^{-6}/K CuNi 44 / NiCr: -80...+200 x 10^{-6}/K				
Lim. surface temperature		Normal operation CuNi 10: 200°C - CuNi 44 / NiCr: 330°C Short time overload CuNi 10: 250°C - CuNi 44 / NiCr: 350°C				
Marking		Cipher stamped, the marking of values according to DIN/IEC 62				