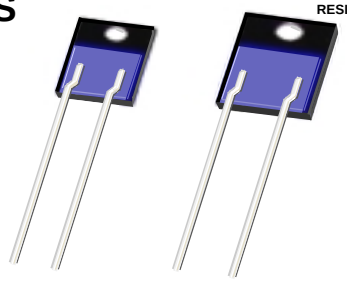
POWER THICK FILM ON STEEL RESISTORS
TO126, TO220, and TO247, 25 to 100 WATT

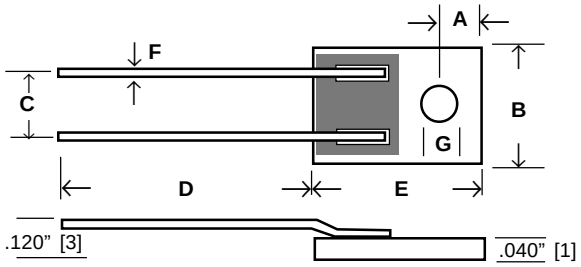
HDP SERIES

Term.W is RoHS compliant & 260°C compatible



FEATURES
- ❒ Industry's most economical TO-style power resistors!
- ❒ Standard resistance range: 0.05Ω to 10KΩ
- ❒ Standard tolerance: ±1%, ±2%, ±5% (available to 0.1%)
- ❒ Flame resistant construction
- ❒ Non-Inductive performance
- ❒ Resistor is electrically isolated from the mounting surface

OPTIONS
- ❒ Option P: Increased pulse capability
- ❒ Option EQ: 24-hour burn-in at full rated wattage (free air)
- ❒ Option 33: 1KV Dielectric Stength
- ❒ Numerous design modifications are available (special marking, custom lead wires, hi-rel screening, etc). Customized components are an RCD specialty!



Award winning design! High power density at low prices! RCD Series HDP resistors were designed to offer precision performance in TO-126, TO-220 and TO-247 style packages. The cost effective design features an oxidized stainless steel carrier which is insulated with a proprietary hi-temp dielectric upon which the resistive film and solder pads are deposited. This enables reduced thermal resistance over conventional ceramic or ceramic/copper sandwich designs, resulting in increased power and overload capability (pulse graph available). The resistive film is insulated with a specialty flame resistant coating offering superior environmental protection.

TYPICAL PERFORMANCE CHARACTERISTICS

Load Life	±1%
Moisture Res.(Mil-Std-202 M106)	±0.5%
Thermal Shock (Mil-Std-202, Method 107 Cond.C	±0.3%
Overload (2x W, 1Sec, nte1.5x Max V)	±0.3%
Terminal Pull Strength	5 lbs direct, 2 lbs peel
Temp.Coefficient 0.5Ω & above 0.05Ω 0.49Ω	100ppm (50& 80ppm opt.) 200ppm (100ppm opt.)
Dielectric Strength [1]	750V Std. (Opt.33= 1KV)
Insulation Resis. [1]	1000M min.
Operating Temperature Range	-55°C to +200°C

[1] Between two terminals and mounting surface, DCV

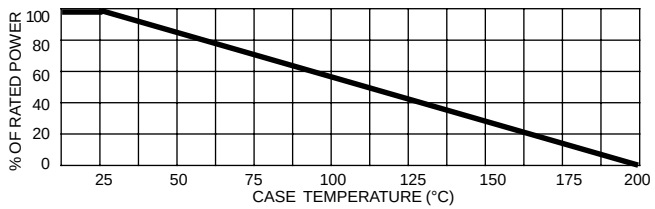
SPECIFICATIONS

RCD Type	Wattage @ 25°C	Max. Voltage	Resistance Range	DIMENSIONS Inch [mm]						
				A	B	C	D	E	F Typ.	G Typ.
HDP126	25W (2W free air)	300V[3]	0.05Ω - 10K[3]	.091±.01 [2.3±.25]	.323±.012 [8.2±.3]	.200±.012 [5.08±.3]	.940 Min. [24]	.465±.012 [11.8±.3]	.031 [.8]	.098 [2.5]
HDP220S[2]	40W (2.5W free air)	300V[3]	0.05Ω - 10K[3]	.117±.01 [3±.25]	.400±.012 [10.16±.3]	.200±.012 [5.08±.3]	0.5 Min. [12.7]	.600±.012 [15.24±.3]	.031 [.8]	.142 [3.6]
HDP220	50W (3W free air)	300V[3]	0.05Ω -10K[3]	.117±.01 [3±.25]	.425±.012 [10.8±.3]	.200±.012 [5.08±.3]	.940 Min. [24]	.650±.012 [16.5±.3]	.031 [.8]	.118 [3]
HDP247	100W (5W free air)	350V[3]	0.05Ω -10K[3]	.156±.01 [4±.25]	.630±.012 [16.0±.3]	.400±.012 [10.16±.3]	.940 Min. [24]	.820±.012 [20.8±.3]	.031 [.8]	.142 [3.6]

[2] Information on HDP220S is preliminary [3] Extended range available

POWER RATING

Power rating is based on the resistor being tightly screwed to a suitable heat sink (with thermal compound) to limit hot spot case temperature to 200°C. Derate wattage by .57%/°C above 25°C (as depicted in chart below). Mounting torque not to exceed 8 in-lbs. Request Applic.Guide R-34 for additional information concerning heat-sink resistor mounting guidelines.



P/N DESIGNATION:

HDP220 ☐ - 1001 - F B ☐ W

RCD Type

Options: P, EQ, 33, etc (leave blank for std)

Resis.Code 1%: 3 signif. figures & multiplier, (R010=.01Ω, R100=.1Ω, 1R00=1Ω, 10R0=10Ω, 1000=100Ω, 1001=1K)
Resis.Code 2%-10%: 2 signif. figures & multiplier, (R01=0.01Ω, R10=0.1Ω, 1R0=1Ω, 100=10Ω, 101=100Ω, 102=1K)

Tolerance Code: J = 5%, G = 2%, F = 1%

Packaging: B = standard (bulk)

Optional Temp. Coefficient: 50 = 50ppm, 80 = 80ppm, 101 = 100ppm (leave blank for standard)

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable, in which case RCD will select based on lowest price and quickest delivery

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